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INQUIRY

CONCERNING

THE RISE AND PROGRESS,

THE REDEMPTION AND PRESENT STATE,

AND

THE MANAGEMENT

OF THE

NATIONAL DEBT

OF

GREAT BRITAIN.

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BY

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PREFACE.

THE author of the following Inquiry has attended for a course of years to the progress of the national debt, from the interest which he felt as a member of the community in a subject of so much importance, and which has now assumed so alarming an aspect. As he has observed that many persons, in general well informed, were imperfectly acquainted with the facts, and entertained crude views of the principles of finance, he trusts that what he now submits to the public, may not be altogether useless.

In the first part, he lays down and enforces some general principles of finance. A person unacquainted with the management of our national debt, may blame him for bestowing labour to prove *truisms*, or principles which cannot be controverted: But to those who know that our

financial measures have been conducted for a course of years upon opposite principles, the arguments adduced will not appear unnecessary.

In the second part, a particular detail is given of the origin, progress, management, redemption, and present state of the national debt. A part of these facts is generally known; but as few are possest of full information on the subject, a publication of this kind seemed wanted *. The author could not well have fixed upon a certain degree of information as what his readers already possessed, and supplied the remainder. Had he attempted to do so, his work would have presented a mutilated appearance, without being a great deal shorter. He has therefore drawn up such a narrative as may communicate full information on the subject to a young person or a foreigner, who has no previous knowledge of it.

The

* The official accounts presented to the House of Commons, are printed for the use of the Members: But none of them have been published for sale since 1798, and they are not easily procured by persons in a private station.

The materials for the statements previous to the year 1786, are drawn from the best authorities that could be procured, and, if not altogether correct, at least come near to the facts.—Those since 1786, are taken from the official papers presented to the House of Commons, and the acts of Parliament relative to finance. The author cannot expect that in so great a variety of figures and statements no error has been committed: But he trusts that the errors are neither numerous nor important.

In the third part, the propriety of the measures adopted in the management of our finance, is examined. It cannot give any reasonable ground of offence, that the plans of respectable authors, and the measures of eminent statesmen, are discussed with freedom. The author is not conscious of having censured any person with asperity: But wherever he thought their opinions erroneous, or their measures improper, he was under the necessity of assigning his reasons for doing so.

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ERRATA.

Page 9. line 19. *for* new taxes, *read* war taxes.
— 10. — 23. *for* every scheme, *read* all schemes.
— 71. — 22. *for* 4 per cents, *read* 3 per cents.
— 32. — 22. *dele* the existence of.
— 193. — 9. *dele* 1810 and.

AN

INQUIRY

CONCERNING THE

NATIONAL DEBT.

THE decision of national contests, in ancient times, depended upon the numbers, courage, and military talents of the contending nations. The invasions of barbarous hordes, destitute of wealth, and impelled to undertake these invasions by poverty, have often accomplished the subversion of large and wealthy nations, amply provided with all the means of warfare that wealth can furnish, and long renowned for military prowess; but fallen from their former pitch of valour, in consequence of the luxury which wealth gives rise to. In this manner were the Roman empires, western and eastern, subverted, and in this manner have the opulent and luxurious nations of the East been repeatedly subdued by indigent and hardy barbarians.

The

The great alteration in the state of mankind in modern times, and the changes introduced into the art of war, have, in some measure at least, transferred the decision of national contests to a different principle. Money is said to supply the sinews of war; and gold, rather than steel, is accounted the instrument which leads to victory. It cannot be doubted that this is true in a certain degree, although not to the extent that some maintain.

In the middle ages, when the ferocious spirit which had formerly animated the northern nations, had in some degree subsided; while commerce was still in its infancy, and little national wealth accumulated; wars were carried on languidly, and were generally of short duration. Their operations were frequently interrupted by truces, and sometimes discontinued through mere feebleness. A victorious army, conducted by a warlike leader, was obliged to stop short in a successful career, from want of resources.

It is not our object at present to inquire into the sources of weakness, and incapacity for foreign expeditions, inherent in the feudal system, then more or less established in every nation in Europe. Under any system of government, the general wealth was insufficient to supply the expense of those extensive and long-continued wars

which

which have been waged in later times. The revenue of the sovereign was derived partly from lands reserved as a royal demesne, and partly from feudal casualties, and afforded a slender provision for maintaining the royal state, and defraying the ordinary expenses of government; but was altogether inadequate to the support of numerous and permanent armies. Supplies from the people were obtained to a certain extent; but the people neither possessed the means, nor had acquired the habit of granting liberal supplies. Princes, under any emergency, real or supposed, or actuated by any scheme of ambition, had recourse to the measure of borrowing. The loans which they raised, were partly compulsory; and as the repayment was ill secured, the rate of interest was high. Sometimes the jewels of the crown were pledged, and sometimes the crown lands were mortgaged. In this manner, the revenues of most of the powers of Europe were anticipated and encumbered.

This irregular mode of borrowing gradually gave way to one more systematic; which has now been carried by this nation to an extent far beyond what was ever known in any other age or nation; far beyond what any person at its commencement, or even after its considerable advancement, believed to be practicable. This system is still expanding. The public debt, which

was inconsiderable at the Revolution, has increased, in little more than a century, to its present magnitude. The increase during every reign, except the pacific reign of George I. has been greater than during the preceding. The increase during every war has been greater than during the preceding. The increase during the latter period of every war, except the present, has been greater than in the earlier period. The increase, by every national exertion, has been greater than administration held forth when the measure was undertaken. The part of the national debt paid off, in intervals of peace, has borne a small proportion to that contracted by the preceding war. No man can foresee how far this system may be carried, or in what manner it will terminate.

It, however, presents an aspect sufficiently important and alarming to command our most serious attention. In various periods of its progress it has obtained the attention, perhaps of statesmen, who were unwilling to publish all they thought; certainly of men who were skilled in the principles of political economy, and well acquainted with the state of our finances; and none of these, it is believed, have considered it in a trivial point of view. Perhaps the unexpected magnitude to which the public debt is carried, the ease with which the funds for its annual augmentations are procured, and the alledged

ledged lightness of the pressure of our taxes, have contributed of late to blunt the public feelings on this important object.

Various schemes have been proposed, by means of sinking funds, for diminishing, and, in course of time, discharging our national incumbrances; and some of these have been carried into execution to a certain extent. The confidence placed in the efficacy of these schemes has contributed further to ease the alarm which the magnitude of the public debt would otherwise have produced. Their principles and probable result ought to be scrutinized in the strictest manner. If they be adapted to the relief and ultimate discharge of our national burthens, under the system of protracted and expensive warfare in which we are engaged, let us enjoy the comfort, which such a prospect affords, upon rational grounds. If they be, in whole or in part, deceptious, it is proper that the deception should be pointed out, and that we should know the hazards and the limits of our financial system. If we shut our eyes to national dangers of whatever kind, we are most likely to be overwhelmed by them. If we see them in their true colours, we stand the fairest chance of encountering them with success. If a candid enquiry into this subject should lead to results less favourable than those which have been held forth by high authority, and are readily

adopted

adopted by the sanguine disposition of the public, the enquirer acts the part of a true friend to his country, and ought not to be branded as a person who designs to excite national discontent, or damp public exertion.

The most perspicuous method of conducting this inquiry seems to be,

First, To lay down some general principles, which, if established, would lead to general conclusions concerning our financial system, and in a great measure, supersede the necessity of examining particular plans which have been proposed or adopted.

Secondly, To give a narration of the manner in which we have proceeded in conducting and accumulating our public debt, and a statement of its present amount and annual charge, and an account of the plans which have been proposed or adopted for its discharge, and their operation. The necessary tables in illustration of these particulars will be subjoined in an Appendix.

Thirdly, By means of these general principles, to scrutinize the efficacy of the schemes to which we trust for the relief of our national burthens; and examine the propriety of the methods we have adopted in conducting our financial operations.

PART I.

GENERAL PRINCIPLES OF FINANCE.

I. The annual income of a nation consists of the united produce of its agriculture, manufactures, and commerce. This income is the source from which the inhabitants derive the necessaries and comforts of life; distributed, according to their stations, in various proportions; and from which the public revenue, necessary for internal administration, or for war, is raised.

II. The portion of national income which can be appropriated to public purposes, and the possible amount of taxation, is limited; and we are already far advanced to the utmost limit.

III. The amount of the revenue raised in time of peace, ought to be greater than the expense of a peace establishment, and the overplus applied to the discharge of debts contracted in former

mer wars, or reserved as a resource for the expense of future wars.

IV. In time of war, taxes may be raised to a greater height than can be easily borne in peaceable times; and the amount of the additional taxes, together with the surplus of the peace establishment, applied for defraying the expense of the war.

V. The expense of modern wars is so great, that no revenue has been raised within the year, sufficient to defray it. Hence the necessity of having recourse to the system of funding or anticipation. The sum required to compleat the public expenditure is borrowed on such terms as it can be procured for; and taxes are imposed for the payment of the interest, or perhaps to a greater extent, with a view to the gradual extinction of the principal.

VI. In every year of war, where this system is adopted, the amount of the public debt is increased; and the total increase of debt during a war depends upon its duration, and the annual excess of the expenditure above the revenue.

VII. In every year of peace, the excess of the revenue above the expenditure, ought to be applied to the discharge of the national debt; and the

the amount discharged during any period of peace, depends upon the length of its continuance, and the amount of the annual surplus.

VIII. If the periods of war compared with those of peace, and the annual excess of the war expenditure, compared with the annual savings during the peace establishment, be so related, that more debt is contracted in every war than is discharged in the succeeding peace, the consequence must be, its amount to a magnitude which the nation is unable to bear.

IX. The only effectual remedies to this danger, are the extension of the relative length of the periods of peace; frugality in peace establishment; lessening the war expenses; and increase of taxes, whether permanent, or levied during war.

X. If the three former of the remedies be impracticable, the last affords our only resource. By increasing the new taxes, the sum required to be raised by loan is lessened. By increasing the taxes in time of peace, the sum applicable to the discharge of debt is increased. These measures may be followed to such an extent, that the savings in time of peace may be brought to an equality with the surplus expenditure in time of war, even on the supposition that the periods of their relative duration shall be the same for centuries

turies to come that they have been for a century past.

XI. When taxation is carried to the extent mentioned above, the affairs of the nation will go on under the pressure of existing burthens, but without a continual accumulation of debt, which would terminate in bankruptcy. So long as taxation is below that standard, accumulation of debt advances; and it becomes more difficult to raise taxation to the proper height. If it should ever be carried beyond that standard, a gradual discharge of the existing burthens will be obtained; and these consequences will take place in the exact degree in which taxation falls short of, or exceeds the standard of average expenditure.

XII. The excess of revenue above expenditure, is the only real sinking fund by which public debt can be discharged. The increase of the revenue, and the diminution of expense, are the only means by which this sinking fund can be enlarged, and its operations rendered more effectual: And every scheme for discharging the public debt by sinking funds operating by compound interest, or in any other manner, unless so far as they are founded upon this principle, are illusory.

THE greater part of the propositions above enumerated, are so incontrovertible, that it may appear superfluous to adduce any arguments in support of them, and the others may be inferred from these by a very obvious train of reasoning. Yet measures inconsistent with them, have not only been advanced by men of acknowledged abilities, and expert in calculation, but have been acted on by successive administrations, and annually supported in parliament, and ostentatiously held forth in every ministerial publication. These seem to have gained possession of the public mind, and we hear them daily extolled and confided in by persons, in other respects, candid and intelligent. This not only supplies an apology for examining the principles minutely, but renders such an examination necessary.

I. *The annual income of a nation consists of the united produce of its agriculture, manufactures and commerce. This income is the source from which the inhabitants derive the necessaries and comforts of life; distributed, according to their stations, in various proportions; and from which the public revenue, necessary for internal administration, or for war, is raised.*

In every nation, a part of the public income must be withdrawn from the use of the inhabitants, and applied to public purposes. This constitutes the national revenue, and is levied from the people by taxes. The amount required for this purpose, even in peaceable times, and when all practicable economy is observed, is considerable. The administration of justice and police, the support of such an army and navy as the present state of surrounding nations renders necessary, even in peaceable times, and various other objects, require a large expenditure. In time of war, the public expenditure is greatly increased.

This expenditure, however reasonable and necessary, is defrayed by subtracting from the funds which supply the wants of the people, and tends to lessen their enjoyments. Taxation, therefore, although necessary, is not desirable. It may arise to a magnitude which will press severely on the comforts, and even encroach on the necessaries

of

of the middling and lower ranks. Unnecessary public expenditure, whether occasioned by engaging in needless wars, or conducting necessary ones with improper prodigality, or by extravagance in internal administration, is a serious evil to the public.

The proposition here laid down concerning taxation, will not be universally admitted. Taxes are affirmed to be harmless, and even useful, upon two principles. They are said to be a spur to industry; and the money collected is said to be no loss to the community, as it is returned by various channels to the people from whom it was raised.

It is foreign to the object of our present inquiry to enter into a full examination of the arguments adduced in support of these opinions; and it could not be done without a full discussion of the principles of political economy.

In regard to the first, we may briefly observe, that the desire inherent in every man to improve his circumstances, is a sufficient and effectual incitement to exertion. The farmer raises all the produce he can from his land. The manufacturer extends his operations as far as his capital, the extent of the market, and the number of hands he can employ, permit him. In time of war, the sums exacted in taxes lessen the abilities, and consequently the exertions of both. In regard to commerce, the effects of war are various.

Many

Many branches are circumscribed, or altogether destroyed. Others go on with increasing alacrity: but taxation is never the cause of their enlargement. The merchant generally advances the tax, and, as this employs part of his capital, he is obliged to circumscribe his speculations. He is afterwards reimbursed, perhaps with profit, by raising the price of his commodities, and thereby devolving the tax on the consumer; but the enhancement of price can never increase the quantity of merchandize sold. The only classes of men upon whom taxation can be reasonably supposed to operate as a spur to industry, are those of the lower order, who earn their subsistence from day to day by the labours of agriculture or manufactures. If a man can maintain himself and family by four days work in the week, he will not, it is said, work for six. In regard to those employed in agriculture, this seldom takes place. The unremitted labours of the peasant are obvious to every one. In regard to manufacturers and tradesmen, there is more foundation for the observation. A few intemperate tradesmen, unless compelled by necessity, may spend a day or two weekly in the ale-house. But it is notorious, that the greater number continue regularly at their work, except upon rare occasions; and not a few wear out their constitutions by excessive and too long continued exertions. It is a comparatively small part of the

taxes

taxes which falls upon persons in these stations of life.

The other argument (that taxes are only an imaginary evil, because the money is returned by various channels to those from whom it was collected,) is founded upon the principle of the mercantile system, that money constitutes wealth—a principle which has been ably refuted by writers on political œconomy, and is now generally abandoned. The farmer pays part of his produce, or its value, in taxes, and has so much the less for other purposes; that is, he is so much poorer. The money may be brought back to him to purchase another part of his produce for the consumption of the army or navy; but the same men who constitute the army and navy must have been maintained, and his produce would have found a market. Even if money were admitted to constitute wealth, it is not true that all the money raised by taxes returns to those who pay them. A large part is sent abroad for subsidies to foreign powers, and for the support of armies employed in foreign service.

II. *The portion of national income which can be appropriated to public purposes, and the possible amount of taxation, are limited; and we are already far advanced to the utmost limit.*

THE truth of the first part of this proposition is so obvious, that it may seem unnecessary to enlarge on it. Yet the unexpected increase of the public revenue has drawn off the attention of many from its ultimate limit. They will not affirm that it may be extended to an indefinite magnitude; but, as it has been carried so much farther than our fathers, or we ourselves in early life, believed to be practicable, they maintain, that its future extension may be greater than any one now conjectures; and that its reaching a maximum is so distant an event, that the prospect of it ought not at present to have any influence on our public measures.

It may, however, be evinced, that a large proportion of our resources is already exhausted; and that the continued increase of revenue, at a rate equal to what has taken place these last twenty years, cannot be carried on for a long term of future years.

The whole annual income cannot, under any exigency, be appropriated for public revenue. A sufficiency must be reserved for supplying the necessaries of life. The surplus only can be applied

plied to public purposes, and the proportion which can be actually applied to them for any length of time fall much below this limit.

Taxes upon articles of luxury, if raised beyond a certain pitch, lessen their consumption, and become unproductive. The same holds in some degree with regard to taxes on every article not indispensably necessary; and our government has hitherto wisely been sparing of taxes on the necessaries of life. Taxes upon commerce, for the same reason, have their limit; and it seems to be believed, that the system of indirect taxation, in some respects the most eligible, is now carried nearly as far as it can be done: For the additional taxes of this kind, imposed for some years past, have been moderate; and recourse has been had to the system little used before, of direct taxation.

Our direct taxes are of two kinds. The first is a tax upon legacies and successions in case of intestacy, being a certain proportion of the moveable property left by every person at his death, varying according to the propinquity of the successor to the deceased, and amounting to ten per cent. on property left to remote relations or strangers. Of the same nature is another tax, a stamp duty on the probates or inventories of personal estates, which allows no abatement, in whatever relation the successor stands to the deceased.

The

The second and more considerable branch of direct taxation is the property-tax, being a certain proportion of income from whatever source it arises. This has been considered as a war tax, and was first imposed in 1799, at the rate of ten per cent. After a short intermission during the peace which succeeded the treaty of Amiens, it was revived in 1804, at the rate of five per cent.; raised in 1806, to six and one-fourth per cent.; and in 1807, to ten per cent.; at which rate it has continued since. Incomes under £50, arising from annuities or professional gains, are exempted; and incomes of that sort under £150, are entitled to certain deductions according to an established scale; but every income, however small, arising from capital of any kind, is subject to the full tax of ten per cent.—The assessed taxes raised upon houses and windows may also be referred to the head of direct taxation.

The amount of property-tax levied, at an average of two years preceding 5th January 1812, was £13,361,285; and the whole average amount of taxes, permanent and annual, raised during three years, after deducting drawbacks, &c. was £65,796,885. If the property-tax be ten per cent. upon the general amount of income, the whole taxation is nearly fifty per cent., or one-half. The lower classes indeed are exempted, or relieved in a certain proportion from the property-tax; and it is probable, that among the higher classes

classes who ought to pay ten per cent. considerable evasions take place: But as the higher and middling ranks pay almost the whole of the assessed taxes, and a larger proportion of the taxes on consumption, their taxation cannot fall much below one-half of their income; and therefore we are already far advanced to the utmost limit which taxation can ever reach. The lower classes indeed pay a smaller proportion; but it will hardly be thought prudent or practicable to raise the taxes upon them in a higher proportion than is done to their superiors.

If we be nearly right in this view, it is impracticable, in the present state of public wealth, to double our present revenue by increased taxation; and it would be a measure of great difficulty and danger to enlarge it by one half.

We do not, however, affirm, that the nominal, or even the real amount of our revenue, can never, at any future period, amount to double of its present magnitude. A nominal increase may arise from the depreciation of the value of money, which has taken place rapidly for a century past, and is probably still advancing. This depreciation is necessarily accompanied by a nominal increase of public expenditure; as every article which government has occasion to purchase, and the pay of every person in civil or military employment under government, must be increased in the same proportion. The increase, therefore, of nominal

revenue, while its effective power remains the same, affords no advantage to the public.

The increase of the money price of commodities arises from two distinct sources, of which, although the effects be blended, the principles, when analyzed, are of a very different tendency. The first is the relative increase of the circulating medium, compared with the mass of commodities in circulation. This, so far as it arises from addition to the quantity of gold and silver in circulation, although it first takes place in the nations that are the proprietors of mines, has a tendency, in no long time, to diffuse itself nearly equally among all nations connected by a regular commercial intercourse. The effect of it is to subject every creditor, public or private, to a loss in proportion to the extent of the deterioration of the value of money. It consequently discharges part of the public debt; but it produces little effect upon the actual revenue, or the state of commerce. An increase of circulating medium, by the artificial means of paper credit, has the same effect upon the price of commodities, and upon the property of creditors, as an increase of circulating coin: But this, although adopted under one form or other by most mercantile nations, has not the same tendency to equalization, and may occasion considerable changes in the state of commerce; always to the disadvantage of the

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nation where fictitious circulating medium most prevails.

The second cause of the increase of the price of commodities, is the taxes imposed upon manufactures, of which we have now a great variety, and upon merchandize imported. The amount of the tax is incorporated with the natural price of the commodity, and paid along with it by the consumer. It is nearly the same as if the consumer paid the natural price of the commodity to the manufacturer or importer, and paid at the same time a tax to government, in proportion to the extent of his consumption. Something of this sort actually took place in what was called the Commutation Tax. When government found it expedient to repeal a part of the duties upon tea, it imposed a tax upon every person for the quantity of tea he was conjectured to consume, as ascertained by the number of windows in the house he possessed. This part of the price of commodities, unless drawn back upon exportation, operates as an obstruction to commerce; and even when drawn back, the relief is only partial. For it is not merely the amount of the tax which the manufacturer must lay upon his commodities: He must have an allowance for the advance of money, and for the additional wages paid to his workmen to enable them to pay the taxes on what they consume. Creditors, public or private, do not sustain any special injury by this

part

part of the increased part of commodities. They only contribute their share, along with others, to the increased exigencies of the public.

A real increase of revenue may arise from an increase of national wealth; and this increase of revenue will be obtained by our existing taxes becoming more productive, without the imposition of new ones. Our wealth has increased to an amazing magnitude, and we do not affirm it has reached its utmost limit. But, considering the extent to which our commerce, a chief source of our wealth, is already carried, it is not reasonable to depend upon its further increase, under growing burthens, as an inexhaustible source for supplying all our exigencies in a state of continued warfare.

III. *The amount of the revenue raised in time of peace, ought to be greater than the expense of a peace establishment; and the overplus applied for the discharge of debts contracted in former wars, or reserved as a resource for the expense of future wars.*

The propriety of this conduct is obvious, and it has been adopted to a certain extent, but has not been followed out with important efficacy.

In the earlier part of our history, the ordinary revenue was hardly sufficient for the ordinary expenditure.

penditure, and parliamentary supplies, in time of peace, were rarely granted. Henry VII. was the last, and, we believe, the only English king, in modern times, who amassed a considerable treasure by a parsimonious and oppressive administration, during a reign the greater part of which was passed in peace. This treasure was dissipated in a short time by his successor. It is unnecessary to enter into a detail of the financial measures of each reign, from that time to the Revolution. Although the period, compared with that which followed, was on the whole pacific, it never afforded any surplus of revenue.

The nature and efficacy of the different kinds of sinking funds established since the Revolution, will be considered in the third part of this inquiry.

The amount of the payments of the public debt, in time of peace, subsequent to the Revolution, has been as follows:

During the peace which followed the treaty of Ryswick, being a period of four years, from 1697 to 1701, there was discharged £5,121,071 of funded debt, being £1,280,268 annually, at an average*; and at the rate of £5. 95 per cent. on the funded debt existing at the termination of the preceding war.

During the peace which followed the treaty of Utrecht, being a period of twenty-six years from 1714 to 1740, there was discharged £7,328,335 of

* See Appendix, Table I.

of funded debt, being £281,860 annually, at an average; and at the rate of £0.51 per cent. of the public debt existing at the termination of the preceding war.

During the peace which followed the treaty of Aix-la-Chapelle, being a period of eight years from 1748 to 1756, there was discharged £5,903 640, being £737,955 annually, at an average, and at the rate of £0.93 per cent. of the funded debt existing at the termination of the preceding war.

During the peace which followed the treaty of Paris, being a period of twelve years from 1763 to 1775, there was discharged £10,314,770, being £859,564 annually, at an average, and at the rate of £0.695 per cent. of the funded debt existing at the termination of the preceding war.

During the peace which followed the American war, being a period of ten years from 1783 to 1793, there was redeemed by the commissioners for the reduction of the national debt, £10,242,100, being £1,024,210 annually, at an average, and at the rate of £0.43 of the funded debt existing at the termination of the preceding war.

No debt was paid off in the short peace which followed the treaty of Amiens in 1802.

IV. *In time of war, taxes may be raised to a greater height than can be easily borne in peaceable times; and the amount of the additional taxes, together with*

with the surplus of the peace establishment, applied for defraying the expenses of the war.

It is not intended to affirm that the power of a nation to bear taxes is increased in consequence of its being engaged in war. The contrary is always the case. Commerce, manufactures, and agriculture are the sources from which all revenue is derived. The two former may be ameliorated in certain branches by war, but they are depressed on the whole; and agriculture also suffers in some degree. But the necessity of the case, real or supposed, has a powerful influence on the public mind, and reconciles the community to submit to privations, which in peaceable times would be accounted unsupportable.

Before the introduction of the funding system, national exertion was limited by the revenue which could be raised within the year: but so soon as that system was established, the selfish principle of devolving the burthens arising from the exigencies or passions of the present age upon posterity was adopted in its full extent. The first attempt to defray any considerable part of the war expences by taxes raised within the year was under Mr. Pitt's administration in 1798, when the aid and contribution tax was imposed, being a large addition to the former assessed taxes on houses, windows, servants, horses, carriages, &c. regulated by an increasing scale according to the amount of the former assessment.

This tax, not succeeding to expectation, only subsisted one year, and was succeeded by the income tax, already mentioned. Another war tax, first imposed in 1798, was an additional duty on all goods exported and imported, partly according to a table, and partly at so much per cent. on their real value, as ascertained by the oath of the merchant, together with a tax upon the tonnage of shipping. This tax is sometimes called the convoy tax, being considered as a compensation for the security which our trade receives in time of war by sailing with convoy. These, together with some lesser articles, amounted in 1811 to £22,312,443, being about one-third of our whole taxation, and are proposed to be taken off so soon as peace is restored.

Whether this relief will be actually granted, or whether the burthens will prove perpetual, is at present among the secrets of futurity. Past experience shews, that taxes have been often imposed at first for limited terms, and afterwards rendered perpetual; and the incroachments that have been already made upon the war taxes, do not promise fair for their speedy removal. In the years 1798, 1799, 1800, a sum of no less than £56,445,000 was charged upon the war taxes,* and distinguished from what was then called the *permanent* funded debt, being intended to be discharged by continuing the war taxes after the res-

* See Appendix, Table VI.

restoration of peace. This system, however, was abandoned under Mr. Addington's administration, and the above sum consolidated with the rest of the funded debt. The war taxes were discontinued during the short peace. The system adopted by Lord Henry Petty, in 1807, would have entirely absorbed the war taxes for an indefinite period if it had been continued; and during the only year it was acted on, the war taxes were mortgaged for the interest and sinking fund of the loan of that year, for a term of at least 14 years, to the extent of - - £1,200,000
and in 1809 the charges of the loan were again laid upon the war taxes—amount, - - - - - 1,040,000

Sum for which the war taxes are pledged, - - - - - £2,240,000

The war taxes are also charged with the interest, &c. of the loan 1811, but certain additional duties imposed that year are added to the war taxes, which are expected not only to defray that charge, but to afford a surplus. The measure, however, of blending the war taxes in this manner, with the general revenue, is not favourable to the prospect of their speedy removal*.

V. *The expence of modern wars is so great that no revenue which has been raised within the year is*

* See Note I.

able to defray it. Hence the necessity of having recourse to the system of funding, or anticipation. The sum required to compleat the expenditure is borrowed on such terms as it can be procured for; and taxes are imposed for the payment of the interest; or perhaps to a greater extent, with a view to the gradual extinction of the principal.

VARIOUS causes may be assigned for the increased expence of war in modern times; the nature of our military weapons; the entire separation of the character of the soldier from that of the citizen; the extensive system of colonization and foreign settlements, in consequence of which, a national contest, which a few centuries ago would have been decided by a battle on the frontiers of the contending nations, now extends the ravages of war to every corner of the globe: And since the system of the balance of power has prevailed, large sums have been granted by more opulent states, as subsidies to others supposed to be interested in the same common cause. While these and other causes have led to great expence, the increase of national wealth has supplied the means, and the rulers of this nation in particular, by a strict adherence to public faith, and by a well regulated system of transfer, have been able to draw forth a large proportion of the wealth of their subjects, and a share of that of foreigners, for the exigencies of the public. The man-

manner of conducting, and the progress of our public debt will be detailed in the second part of this inquiry.

VI. *In every year of war, where this system is adopted, the amount of the public debt is increased, and the total increase of debt during a war depends upon its duration, and the annual excess of the expenditure above the revenue.*

VII. *In every year of peace, the excess of the revenue above the expenditure ought to be applied to the discharge of the national debt; and the amount discharged during any period of peace depends upon the length of its continuance and the amount of the annual surplus.*

VIII. *If the periods of war compared with those of peace, and the annual excess of the war expenditure compared with the annual savings during the peace establishment, be so related, that more debt is contracted in every war than is discharged in the succeeding peace, the consequence is a perpetual increase of the debt; and the ultimate consequence must be its amount to a magnitude which the nation is unable to bear.*

The two former of these propositions appear incontrovertible, and the first part of the other

other follows from them as a necessary consequence.

The doctrine of our national debt amounting to a magnitude which the nation is unable to bear, will not be easily relished. We are accustomed to hear of our unexhaustible resources, and we have experienced the amount of our debt to an amazing magnitude with less pressure than might have been expected.

The observations already made in illustration of the second proposition show how far our resources are already exhausted.

Table I. Appendix, contains a statement of the amount of the funded debt at the commencement of each war, and of each peace from the Revolution in 1688, to the present time, being a period of 123 years, and the amount of debt, contracted in each period of war, and discharged in each period of peace. The number of years of war in that period is 62, and those of peace 61. But the duration of war expenditure compared with that of peace establishment will be found considerably greater than that proportion, for,

1st. A long time is required at the termination of a war, before affairs can be brought to the situation of a peace establishment, and a large expence is incurred during that period. If we add a year of war expenditure to the duration of each war on this account, we shall not go beyond the fact.

2d. Besides the wars enumerated in the statement, the nation has been put to expence by several armaments, when national disputes assumed the appearance of war, although they were adjusted with slight or no hostilities. Something of this kind occurred in regard to Spain oftener than once in the early part of the 18th century, and again with the same power, in 1770, from a dispute concerning the Falkland islands in the south extremity of South America, and in 1790, from a dispute concerning Nootka Sound in the northern extremity of North America. When these circumstances are attended to, the period of war expenditure will be found considerably greater than that of peace establishment.

The whole debt contracted during 62 years of war is £618,080,887, being £9,969,046 annually, at an average.

The whole debt discharged during 61 years of peace is £38,909,936, being £637,867 annually, at an average.

But the average sums are not those which chiefly claim our attention. It appears by inspection of the table how rapidly the debt contracted in the latter part of the period has increased, and future events will more probably assimilate to that than to an earlier period.

The whole debt contracted during the period of war is to the whole debt discharged during the period of peace, as 15.88 to 1.

The

The average debt contracted annually in war is to the average debt paid annually in peace, as 15.63 to 1.

It is maintained by many that there is no cause to be alarmed at the magnitude of the national debt, because the greater part of the national creditors are our fellow citizens, and a debt owing by one part of the community to another is in effect no debt at all. Some go so far as to maintain that the national debt is a part of our national wealth, and ought to be reckoned, along with the value of our commerce, manufactures, and agriculture, in estimating the amount of the national capital.

With these last we shall not undertake to argue. Towards the others we shall partly concede the point. But when every reasonable concession is made, enough still remains to place the magnitude of the national debt in an alarming point of view.

The large amount which the public have been able to borrow is a proof of the existence of a large capital existing among the community, and affording a surplus after the demands of commerce, manufactures, and agriculture, in their actual state, are supplied. But it is unwarrantable to affirm that the contraction of debt is necessary in order to find employment to this capital, or that it could not have been invested in various ways

to

to the further increase of our public wealth in its genuine sources. This would have diffused an additional share of the comforts of life through every rank of society. The taxes, which the public debt requires, lessen these comforts. The wars in which money has been expended, if not unnecessary, are certainly unprofitable. The interest of the public debt is, for the greater part, drawn from the profits of the industrious part of society, and paid to the idle and luxurious. It is drawn from the merchant, the manufacturer, the farmer, and paid to the stockholder. The amount so drawn may be augmented till it occasion the ruin of those who pay it, and involve the whole community in distress and confusion.

Perhaps some think, though they do not venture to say, that matters may be restored, by means of a public bankruptcy: and that this nation, after such a measure, will retain the same degree of internal wealth, and support the same strength and importance in its relations to foreign states as if no national debt had ever existed.—It will not be necessary to enter into a long refutation of this opinion. The extent of distress attending a public bankruptcy, whether brought on systematically or overtaking us as the necessary consequence of our being overwhelmed with the magnitude of our debt, would be so great; the present overthrow of every thing valuable so complete and their future extrication so uncertain,

certain, that we can hardly conceive a greater public evil. Among its probable consequences we may reckon internal insurrections, and foreign invasions by rival or hostile nations, taking advantage of the time of our distress and weakness.

Every friend to Britain, every friend to humanity, must deprecate such an event. And a proper sense of the calamities in which it would involve us, should keep us at a cautious distance from the verge of so dreadful a precipice.

"Does the circumstance of our creditors "being our fellow citizens afford no relief to the "magnitude and burthen of our national debt, "and are we in the same situation, as if we were "indebted to foreigners?" We do not affirm so. So long as public faith is maintained, there are two ways in which the burthen of our debts is alleviated by having our countrymen for our creditors.

1st. A part of the taxes raised for the payment of interest, and also for other purposes, falls upon the stockholder, and this part is more considerable as the national debt increases, and bears a greater proportion to the whole of the national capital.

2d. The expenditure of the stockholder may in some measure increase the profits of the industrious citizen.

But allowing for these advantages, still, the greater part of the burthen falls upon the industrious

trious, and it receives only a very partial relief from any advantage resulting from expenditure of the idle.

It is argued by those who still retain the generally exploded opinions concerning money, that all the money raised in taxes, at least all that comes to the stockholder, is spent among those who pay it, and that therefore it is no loss to them. As well might a person forcibly enter a merchant's house, and take away his money, and tell him he did him no injury, for the money or part of it would be employed in purchasing the commodities he dealt in, upon which he would receive a profit.

Were a national bankruptcy ever to take place, perhaps less evil might attend it if our creditors were foreigners. It would not in that case occasion internal distraction and convulsion. The evil to be dreaded would be war with the injured nations. And as we would retain our full national strength, and our resources would then be unincumbered with debt, they might not find it prudent to attack us. However, as we hold a breach of national faith in detestation, we recollect with pleasure, that the far greater part of our creditors are our fellow citizens.

In part of the foregoing argument we have spoken of the industrious citizen and the stockholder as being separate persons, and, in some respects, of opposite interests. In many indivi-

duals these characters are blended: But, in most cases, the one or the other character predominates, and if in a few, they be nearly equally balanced, it does not affect the general argument,

IX. *The only effectual remedies to this danger are the extension of the relative length of the periods of peace; frugality in the peace establishment; lessening of the war expenses; and increase of taxes, whether permanent, or levied during war.*

As the object of the present inquiry relates to our national revenue, debt, and resources, we shall avoid, as far as possible, the collateral subject of entering into an examination of the necessity or rashness, the expediency or inexpediency, the justice or injustice of the wars in which we have been engaged. If the result of our inquiry should be, that we are not able for another century to carry on our warlike system in a manner similar to that which we have done in the period above reviewed, the rational inference is that we should engage in wars with much circumspection, and terminate them as soon as can be done with safety.

If nations could derive wisdom from past experience, and from the judgment which is formed of many former wars, now that the passions which excited them are subsided, much might be urged

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in favour of a pacific system. It will be admitted that we have frequently engaged in war for trivial or unattainable objects—that the objects have generally not been attained—that, under pretence of guarding against distant and improbable dangers, we have incurred present and imminent ones—that passion and national pride, rather than rational views of national interest have been often the ruling principles of our public conduct—that, as we have engaged in war rashly, we have persevered in it with obstinacy, and rejected offers of pacification, more favourable than those which we were afterwards under the necessity of accepting.

The view we entertain of the war of the present day is seen through a different medium. Every thing valuable to us as men and as a nation is at stake—our national prosperity, our national honour, our national existence—our liberties and lives. No exertion can be too great. The power of our enemy is so formidable, and his ambition so insatiable, that we have no alternative but to prosecute the war with the utmost vigour, till we lay him prostrate at our feet. No pressure of increasing burthens is to be regarded, no dread of exhausting our resources entertained. If he make repeated overtures of pacification, they are to be considered as insidious, and rejected with scorn.

While

While these passions prevail, any arguments against our belligerent conduct, whether drawn from past experience, or from a cool view of present circumstances, will be urged in vain. As the judgment we now form of the measures of our ancestors is different from theirs, it may happen that the judgment formed of the measures of the present day by posterity, or by the younger part of our fellow citizens, when in advanced life, may be different from ours.

Suppose the present war brought to a termination in a manner that left our situation in the scale of nations nearly the same as it has been for some centuries past, could it be reasonably expected that the succeeding period would be more pacific than the past? We can hardly expect it would. If reason and past experience were listened to, we have seen what they have to urge: but the world is not now in its infancy, and experience has long furnished the same lessons of the inefficacy and destructive tendency of war, in vain. It is likely the same passions will involve rival nations again in the calamities of war, upon slight or no grounds. If there be any circumstance likely to assuage the passion for war, it arises from the pressure of public debt, a system peculiar to modern times, the effects of which, when carried to its utmost extent have not yet been submitted to the test of experience.

In

In regard to the public expense during a future peace, it is generally believed that the state of Europe, under any probable terms which the present war may be concluded by, will be such as may render it necessary to keep up a higher peace establishment than we have hitherto done.

In regard to the expense of future wars, it is not in general wise, admitting their necessity or propriety, to be sparing in exertion in those points where the contest is likely to be effectually decided. Our operations ought to be as prompt and vigorous as we can make them. Neither ought we to be sparing in any expense that contributes to the health and comfort of the soldier, the care of the sick and wounded, the comfortable provision for the worn out and disabled. But there are other points, in which, without enfeebling national exertion, or without encroaching on the demands of humanity, economy may be properly practised. The following questions in regard to the expenses of past wars may be proposed. Have there been no unnecessary and ineffectual expeditions undertaken? have not considerable armies been kept in places where they could be of little or no use? Has there been no lavish expenditure in fortifications and barracks? Has not the system of increasing the number of our foreign colonies, and consequently the expense of establishments and garrisons, been followed to the utmost extent, and in quarters

ters where it did not weaken our enemy; and where, by employing a part of our disposeable force, it weakened our exertions in points of more importance? Have the national expenses been conducted with all prudent frugality? or have not enormous fortunes been amassed by public contractors? have not large sums been retained for long periods of time in the hands of public accountants? and have not large sums been ultimately lost by the insolvency of these accountants, from whom sufficient security had not been taken? Have not large subsidies been granted to foreign powers whose fidelity we had just cause from experience to distrust, and who actually proved unfaithful?

Most of these questions will be generally answered in the affirmative of misconduct: and yet we find the estimate of the expenses of each succeeding year are formed on a larger scale, that the execution generally exceeds the estimate, and that motions for inquiry into the public expenditure and correction of abuses, are generally discouraged, and that even where abuses in public office are admitted, speedy and effectual measures are not taken for their correction.

X. *If the three former of these remedies be impracticable, the last affords our only resource. By increasing the war taxes, the sum required to be raised by loan is lessened. By increasing the taxes in time of peace, the sum applicable to the discharge of debt is increased. These measures may be followed to such an extent, that the savings in time of peace may be brought to an equality with the surplus expenditure in time of war, even on the supposition that the periods of their relative duration shall be the same for centuries to come that they have been for a century past.*

The difficulty and danger of a further increase of our taxes have been already considered. Every new imposition, as we approach the limit of taxation, becomes more oppressive and more unproductive. But if we cannot or will not adopt more frugal or more pacific measures, there is no alternative but an increase of our taxes to the extent above mentioned: And, if we cannot bear this increase, it is impossible to escape national bankruptcy.

We are far advanced to the utmost extent to which taxation can be carried: But we have also gone far towards defraying our annual expenses by money raised within the year. During the last ten years, or thereby, though we have been engaged in a war of unprecedented expense, the

amount of our taxes has been greater than the expense of the war, but insufficient to answer, along with that expense, the interest of the debt formerly contracted. Taxation is now carried, perhaps as far as is necessary upon the supposition that the intervals of peace in future were equal to the time of war. We have now been engaged in war for twenty years, with scarcely any interval, and without having approached to the ostensible object for which it was undertaken; and some maintain, that since the former system of Europe is now dissolved, there is no *safety* for us but in *perpetual war*. These, if they were consistent, would perceive the necessity of raising our taxes to the amount of our full expenditure. We reprobate the idea of eternal war as barbarous and impracticable: But if we have still the prospect of long protracted war, prudence requires us to raise our taxes to the measure of our expenditure; which, however severe a pressure it may occasion at present, must, if deferred, occasion a still heavier pressure at a future period, when our public debt is further accumulated.

So long as the practice was followed of defraying almost all the war expenses by loans, and imposing taxes only for the payment of interest, the burthens of the war were so lightly felt, that the national promptness to engage in war was scarcely under any restraint. Now, when a great part

of

of the expense is raised within the year, and much of it by direct taxation, the burthen is far more heavy, and this pressure would go far to indispose the nation for war, except in a situation where the necessity for prosecuting it was considered as great, or where hostile passions were excited to a more than usual height. Still, however, our burthens are not raised to the measure of our expenditure, and therefore the restraint does not operate so far as it ought. Let us now feel the full extent of the burthens we must ultimately bear, and let it be tried how far our relish for war will continue. Justice to posterity requires this. Every generation has its own struggles and contests. Of these, and of these only, it ought to bear the burthen. We at present labour under a heavy debt contracted by our ancestors, in wars, perhaps unnecessary, certainly arising from causes now past and gone, with which we have no concern; and, under a still heavier one, arising from wars waged in our own days, the burthens of which at the time we were unwilling to bear. Had the debt accumulated in these wars not existed, our present taxes would have been more than sufficient to defray all the expenses of our present war; widely as it is extended, and lavishly as it is conducted.

XI. *When*

XI. *When taxation is carried to the extent mentioned above, the affairs of the nation will go on under the pressure of existing burthens, but without a continual accumulation of debt, which would terminate in bankruptcy. So long as taxation is below that standard, accumulation of debt advances, and it becomes more difficult to raise taxation to the proper height. If it should ever be carried beyond that standard, a gradual discharge of the existing burthens will be obtained, and these consequences will take place in the exact degree in which taxation falls short of, or exceeds the standard of average expenditure.*

XII. *The excess of revenue above expenditure is the only real sinking fund by which the public debt can be discharged. The increase of the revenue, or the diminution of expense are the only means by which this sinking fund can be enlarged, and its operations rendered more effectual; and all schemes for discharging the national debt, by sinking funds, operating by compound interest, or in any other manner, unless so far as they are founded upon this principle, are illusory.*

The progress and discharge of the debt of a nation are regulated by the same principles as those of an individual. In regard to the former, however, we may extend our views to a greater length of time; and experience shows, that measures

sures of public finance are often conducted with a degree of imprudence seldom exhibited in the management of private affairs.

It is true that upon abstract principles, the smallest sum lent out for compound interest will, in length of time, increase to an indefinite magnitude* : But it is obvious, that the improvement of money in that way would be limited, at a certain amount, by the want of demand from borrowers, and the impossibility of investing it in productive capital of any kind. It is restricted within a much narrower limit by the mutability of human measures, and the actual impossibility of adherence to the same system, conducted by successive trustees through many generations. It is true that if the system were invariably adhered to, the sum would increase at the rate which calculation points out, until it was limited by the impossibility of finding borrowers, or employing it in any profitable manner.

The system of accumulating a national treasure has been long laid aside, and is not likely to be revived. We may therefore dispense with any further consideration of nations storing up wealth, and bestow our attention on the actual case of nations labouring under debt ; sometimes endeavouring to discharge it ; often obliged to increase it.

Suppose an individual has contracted a certain extent of debt, and afterwards attains to circumstances

* See Note II.

cumstances which enable him to discharge it. If no oppressive and usurious measures be practised against him by his creditors, and if he pay the interest regularly, the sum which he must pay altogether, before he be clear of debt, is the amount of the money he borrowed, and the simple interest of each portion of the same, from the time of its being borrowed to the time of its repayment. Suppose he borrows £10,000, and that for ten years he pays the interest, but no part of the principal. If the rate of interest be 5 per cent. he pays during that time £500 annually for interest, or £5000 altogether, and if by a sudden acquisition of wealth he is able to discharge the debt at the end of ten years, he pays exactly £15,000 altogether. But suppose, by an amelioration of his circumstances he is enabled to pay £1000 annually to his creditors, for principal and interest. The first year he pays £500 for interest, and £500 towards the discharge of the principal. The remaining debt is £9500, and the interest of this being L475, if he can pay £1000 next year, he discharges £525 of the principal, leaving a debt of £8975. The interest of this is £448, 15s. and next year, by paying £1000, he discharges £551, 5s. of the principal, and reduces the debt to £8423, 15s. If he continue to act in this manner, the whole debt will be discharged in about 14¼ years; and the whole sum which he pays, including the £5000 paid during the

the first 10 years, is £19,250 nearly, being the amount of the principal, of 10 years interest on £10,000, of 11 years interest on £9500, of 12 years interest on £8975, of 13 years interest on £8423, 15s. and so on; altogether, the principal, together with the simple interest of each portion of the same, from the time that the debt was contracted, till the time that portion was repaid. If he can only spare L750, and therefore discharge L.250 of the principal the first year, it will require somewhat above 22 years to discharge the whole, and if he can only spare L.600 and therefore discharge L.100 of the principal the first year, it will require 37 years. In all these cases, it is the surplus of L.500, of L.250, or of L.100, which the debtor can spare above the interest, that enables him to discharge the principal.

Instead of conducting the business in this manner, he may pay only the L.500 of interest to his creditors and lend out the other L.500 at interest, and lend again L500 more at the end of the next year, and so on, accumulating the sums lent by compound interest, till it amount to L.10,000, and then discharge his whole debt at once. It will require exactly the same time of $14\frac{1}{4}$ years to accomplish this. If he transact the business himself, the second way will be attended with more trouble, but the result will be the same. If he employ an agent to transact the loans, he will be

be a loser by following the last mentioned method, to the extent of the fees paid for agency.

If the debtor be able to pay no interest during the first ten years, the creditors will either insist on accumulating the interest with the principal, in the manner of compound interest, or the debtor must borrow annually from other hands, to pay the interest annually to his original creditors, and must also borrow more each succeeding year, to pay the interest of the debts thus contracted. In either way, his debt at the end of ten years will amount to L.16,289, the interest of which being L.814, 9s. an annual payment of L.1000 would discharge only L.185, 11s. of the principal debt the first year, and would require about 35 years to discharge the whole, whether he pay the L.1000 annually to his creditors to lessen the principal, after payment of the interest, or whether he accumulate the overplus by compound interest till he be able to pay the whole debt at once.

Substitute millions, or ten millions for thousands, and the above reasoning is equally applicable to the public debt of a nation.

If the debt be ever discharged, which can only be done by a surplus revenue, and if the business be transacted as private affairs are, where the creditor is entitled to no more than the sum lent, together with the interest, the time re-

required for the discharge of a public debt will be the same as that for a private one, when the proportion of surplus revenue is the same; and this holds whether the surplus be paid annually to the creditors, in discharge of part of the debt, so far as it will go, or accumulated in a sinking fund, in the hands of Commissioners appointed for that purpose.

The whole sum paid to the public creditor, before the debt be discharged, is equal to the sum advanced by him, together with the simple interest of each portion of the same, from the time it was advanced to the time it is repaid, providing the interest be paid regularly from the time the debt is contracted. But if the payment of the interest be suspended for a certain time after the debt is contracted, then the whole sum paid is equal to the principal debt, together with the compound interest of the same, during the period of suspension, and the simple interest of each portion of this accumulated sum, from the time it is put in a train of payment, till that portion be paid.

But the manner in which our public debt is contracted is greatly more unfavourable to its repayment than in the case of private business. A certain capital in the 3 per cents. or other fund, is assigned to the public creditor for every L.100 advanced, according to the price of the funds at the time, and allowing always a profit to the lender.

der. He is repaid according to the price of the funds at the time of repayment; and as the repayment is in time of peace, when the funds are always much higher than in time of war, the sum repaid is always much greater than the sum advanced, together with the interest.

There is generally a colateral circumstance in favour alike of the public and private debtor, which was already mentioned in the illustration of the second general proposition, arising from the alteration of the value of money. In regard to either, if the interval between the time of borrowing and repaying be considerable, the nominal sum paid is likely to be of less real value than a like nominal sum at the time the debt was contracted.

Neither this advantage which the public debt possesses in common with the private one, nor the disadvantage which the public debt labours under from the above mentioned imprudent manner in which it is conducted, has any relation to the argument concerning the inefficacy of the sinking fund.

Let us next consider the case of a nation engaged in war, the expence of which it is unable or unwilling to bear during the year. Suppose the annual expenditure of the war added to the peace establishment and interest of former debts, exceed the present revenue, by 11 millions. That sum must be raised by loan, or additional

taxes,

taxes, and should be raised by the latter as far as the nation can bear them.

If no additional taxes be imposed, the annual loans of 11 millions will accumulate against the nation with all the disadvantages of compound interest.

If a sum less than the interest be raised by additional taxes, the loans will accumulate in some degree with the disadvantage of compound interest.

If a sum equal to the interest be raised by additional taxes, the nation will be burdened at the conclusion of the war, or at any period of its continuance with a capital debt equal to the amount of the loans, and with additional perpetual taxes equal to the amount of the simple interest of the same.

Suppose the war to continue ten years, and the loans to be raised in the 5 per cents. at par. The whole sum, borrowed will be 110 millions, and the interest of each loan being L.550,000, the whole additional interest will be L.5,500,000.

The surplus of the revenue, now burthened with this additional sum, above a peace establishment, is the only fund from which this debt can be discharged during a subsequent peace.

If a sum greater than the interest of the loan be raised by additional taxes, there will be less accumulation of capital; and the further taxation is carried, the more accumulation is restricted: but,

but, until taxation is carried so far as to defray the expenses within the year, there will be a certain accumulation; and till it be carried so far as to confine the accumulation within the limit that may be reasonably expected to be discharged in a subsequent peace, the system will prove ultimately ruinous.

The restraint given to the accumulation of debt in any period, short or long, depends altogether upon the excess of the additional taxes above the interest of the loans, and it makes no difference whether they be considered simply as war taxes, or permanent taxes, according to future exigencies; or whether they be connected with a sinking fund of any kind.

Suppose L.610,000 is raised annually by additional taxes; as this does more than cover the interest of the loan, and part of it may be applied to the expense of the war, a less loan than L.11,000,000 will be sufficient, and the loan will be less in each succeeding year, so long as L.11,000,000 is the sum wanted.

The progress of the funded debt will be as follows,

The first year L.550,000* from the additional taxes being applied in payment of the interest of the

* All the calculations in this inquiry, unless when otherwise mentioned, are made at 5 per cent. interest; the 3 per cent. funds are valued at 60, the 4 per cents at 80, and the 5 per cents at par.

the loan, there will be a surplus of L.60,000 applicable to the service of the second year.

The loan required the second year will therefore be L.10,940,000, and the amount of the loans, in the two first years, L.21,940,000, the interest of which is L.1,097,000, and as L.610,000 more of additional taxes are imposed the second year, or L.1,220,000 in these two years, there will be a surplus after paying the interest, of L.123,000 applicable to the service of the third year, and the loan required for that year will be L.10,877,000.

The amount of loans during these three years is therefore L.32,817,000, the interest thereof, L.1,640,850, the additional taxes imposed during these three years, L.1,830,000, affording a surplus of L.189,150, applicable to the service of the fourth year.

The progress during ten years is exhibited in the following Table.

	Loan each year,	Amount of Loans.	Amount Interest.	Amount add. taxes.	Surplus.
1st year,	11,000,000	11,000,000	550,000	610,000	60,000
2d year,	10,940,000	21,940,000	1,097,000	1,220,000	123,000
3d year,	10,877,000	32,817,000	1,640,850	1,830,000	189,150
4th year,	10,810,150	43,627,850	2,181,393	2,440,000	258,607
5th year,	10,741,393	54,369,243	2,718,462	3,050,000	331,538
6th year,	10,668,462	65,037,705	3,251,885	3,660,000	408,115
7th year,	10,591,885	75,629,590	3,781,480	4,270,000	488,520
8th year,	10,511,480	86,141,070	4,307,043	4,880,000	572,947
9th year,	10,427,053	96,568,123	4,828,406	5,490,000	661,594
10th year,	10,338,406	106,906,529	5,345,326	6,100,000	754,674

Thus

Thus, at the end of ten years, when additional taxes are imposed annually to the extent of L.610,000, the amount of funded debt is L.106,906,529, instead of L.110,000,000 which it would have been if the additional annual taxes had been only L.550,000.

If, instead of conducting the business in this manner, we trace the effects of the system, actually followed, of transferring L.1,200,000 annually from the public revenue to Commissioners appointed for the reduction of the national debt, by whom also the interest of the sums redeemed are applied each succeeding year, in addition to the above mentioned sum for its further redemption, the result will be found exactly the same.

As L.11,000,000 is annually wanted to compleat the war expenses, and L.1,200,000 to be transferred to the Commissioners, the annual loan must be L.12,200,000, and the amount of the loans in ten years, L.122,000,000.

The first year, L.1,200,000 of the debt is redeemed, leaving L.11,000,000 unredeemed.

The second year, L.60,000, the interest of this redeemed debt being added to the L.1,200,000, the sum applied by the Commissioners for the redemption of the public debt is L.1,260,000 and this redeeming an equal sum in the 5 per cents. the whole sum redeemed the two first years is L.2,460,000 and the loans of these years being L.24,400,000, the unredeemed

deemed debt at the end of the second year is L.21,940,000.

The interest of the redeemed debt now amounts to L.123,000, which being added to L.1,200,000 gives L.1,323,000, applicable to the redemption of debt. The whole sum borrowed the first three years is L.36,600,000, the whole sum redeemed, L.3,783,000, and the unredeemed debt L.32,817,000.

The progress during ten years is as follows:

	Loan each year.	Amount of Loans.	Debt redeemed each year.	Amount of debt redeemed	Interest on debt red.	Debt remaining unredeemed.
1st year	12,200,000	12,200,000	1,200,000	1,200,000	60,000	11,000,000
2d year	12,200,000	24,400,000	1,260,000	2,460,000	123,000	21,940,000
3d year	12,200,000	36,600,000	1,323,000	3,783,000	189,150	32,817,000
4th year	12,200,000	48,800,000	1,389,150	5,172,150	258,607	43,627,850
5th year	12,200,000	61,000,000	1,458,607	6,630,757	331,538	54,369,243
6th year	12,200,200	73,200,000	1,531,538	8,162,295	408,115	65,037,705
7th year	12,200,000	85,400,000	1,608,115	9,770,410	488,520	75,629,590
8th year	12,200,000	97,600,000	1,688,520	11,458,930	572,947	86,141,070
9th year	12,200,000	109,800,000	1,772,947	13,231,877	661,594	96,568,123
10th year	12,200,000	122,000,000	1,861,594	15,093,471	754,674	106,906,529

Thus it appears that the amount of unredeemed debt at the end of ten years, when the system of the sinking fund is strictly followed, is L.106,906,529, the same as the amount of the debt under equal expenditure and taxation when no sinking fund is established. It is the same every year of that period, and will remain the same for any length of time. The surplus of taxes applicable to the expense of the war on the one system answers to the interest of debt redeemed,

deemed, applicable to its further redemption, on the other.

If instead of funding in the 5 per cents. at par, the transactions be made in the 3 per cents. at L.166. 13s. 4d. capital, for L.100 borrowed, (and this is nearly what has been done) the nominal sums funded and redeemed are increased in the proportion of 5 to 3, but no alteration is made in the interest or the real value of the debt.

If the L.11,000,000 required yearly be funded in the 3 per cents. the capital funded is L.18,333,333, and if a sinking fund of 1 per cent. on this nominal sum be established for its redemption, the sum required to be raised by additional taxes yearly for that purpose is L.183,333. This will have a greater effect in preventing accumulation or increasing the sum redeemed than a surplus of L.60,000 in proportion to the sums: But the reasoning adduced in regard to the one is equally applicable to the other.

We have now examined the supposed effects of sinking funds, in the cases of diminishing debt during peace, and of increasing debt during war, with a degree of prolixity which so clear a subject little required, had not the efficacy of a sinking fund, and omnipotence of compound interest been strongly urged by respectable authority, and taken possession of the public mind,

and

and influenced the public measures of finance for a course of years. We trust we have demonstrated their futility. No person ever doubted that increase of taxation, and saving of expenditure, are means of retarding the accumulation of debt. We ought to embrace the former as far as we are able, and the latter, as far as safety permits. But the point at issue is, whether taxation and expenditure being the same, a sinking fund produces any beneficial effect.

If a period of peace were protracted till the public debt were discharged, the taxes might and would be diminished to the limit of a peace expenditure, for no person now thinks of accumulating national treasure for future purposes. If the periods of war and peace be so related, that the debt contracted in the former be discharged in the latter, the amount of the debt vibrates, and this system may go on for an unlimited length of time. But, if more debt be contracted every war, than is discharged in the subsequent peace, (and this has hitherto been the real case,) and if the accumulation be in a greater proportion than the increase of national wealth, there is a limit beyond which the system cannot be supported.

PART II.

HISTORY OF THE PUBLIC DEBT OF GREAT BRITAIN.

SECTION I.

Progress and Manner of conducting the Funded Debt.

THE funding system commenced at the Revolution. The debt existing at that time was inconsiderable, and not reduced to any regular form. During the war waged by King William against the abdicated monarch, and the king of France who supported his claims, it was found impracticable to raise the requisite sums within the year, and recourse was had to loans; for discharging which taxes were imposed, to continue for a limited number of years; it being expected that the produce of these taxes would discharge the debts in the periods for which they were granted. These expectations were not realized, and the taxes were afterwards rendered perpetual.

Loans were also raised during that war on annuities for lives; and the amount of the public debt at its termination by the peace of Ryswick, in 1697, was L.21,515,772. The amount, at the commencement and termination of each war since the Revolution, is exhibited in the Appendix, Table I.

The legal rate of interest at the commencement of the funding system was 6 per cent, and it was reduced in the year 1714 to 5 per cent.* The rate of interest granted for the public debt has been often higher than the legal rate: But instead of assigning capital to the public creditor equal to the sum borrowed, and a rate of interest which it could be procured for, according to the circumstances of the times, the practice has generally been to fix upon a low rate of interest, and assign to the public creditor a capital larger than the sum borrowed:

The loans have been made generally in a fund bearing 3 per cent. interest on the nominal capital, some in a fund at 4 per cent. and some in one at 5 per cent. These last have sometimes been obtained at par, (that is, upon assigning to the creditor a capital equal to the sum advanced by him) but generally above it. The loans contracted in a 3 or 4 per cent. fund, when no colateral advantage was granted, have been generally at a greater capital than the sum borrowed.

Some

* See Note III.

Some loans have been contracted altogether on annuities for lives or years: But most of these annuities, which at present amount to a large sum, have been granted as a colateral advantage to the public creditor, who received the greater part of his recompence in a capital bearing interest at three, four, or five per cent.

Annuities for lives have sometimes been granted upon schemes called *Tontines*, in which the benefit of survivorship is allowed. The subscribers to these schemes appoint nominees, who are divided into classes, according to their ages, and a suitable annuity is assigned to each; and when some of the lives fail, the amount of the annuities appertaining to each class is divided among the survivors, so long as any remain, or at least till the annuity amount to a large sum, according to the terms of the scheme.

Tontines seem adapted to the passions of human nature, from the hope every man entertains of longevity, and the desire of ease and affluence in old age; and they are beneficial to the public, as affording a discharge of the debt, although a distant one, without any payment. They have been extensively adopted in some foreign countries, but seldom in Britain. The last, and almost the only scheme of this kind now subsisting among us is that of 1789. The terms were, that each subscriber of L.100. 5s. should

should be entitled to an annuity on the life of his nominee, from L.4. 8s. to L.5. 5s. according to their age, till the annuity on the original share should amount to L.1000, the excess then falling to the public. Although the sum proposed to be raised in this way was only L.1,002,140, the persons who contracted with Government for the whole were unable to compleat it; and an alternative was afterwards allowed them of a long annuity.

The annuities for fixed terms now existing (called Long Annuities) all terminate at the same time, in 1860. The first of these was granted in the year 1761, being an annuity of L.1 for 99 years, upon every L.100 subscribed to the loan of L.11,400,000 contracted that year in addition to the permanent annuity of L.3, on a capital equal to the sum subscribed. Many other annuities of this kind have been since granted, and all of them for such periods as to terminate at the same time. Their amount, 5th January, 1812, was L.1,140,601, and, except what was granted in place of the tontine of 1789, they are all in addition to the perpetual annuities on the capitals of the loans.

Another colateral advantage has sometimes been granted to the public creditors from lotteries. Tickets have been granted to the subscribers to the loans on terms considered as beneficial, and instead of paying money to the hold-

holders of the fortunate tickets, the prizes were assigned them in capital stock of that kind in which the loan of the year was funded. This method was followed in most of the loans during the seven years war, from 1756 to 1763. During the subsequent peace, the lotteries were several times connected with the schemes adopted for discharging a part of the public debt. In the lottery of 1769, the prizes were paid in money: But during the American war, the system followed in the seven years war was revived. The lotteries, from 1777 to 1784 inclusive, were connected with the loans, and the prizes funded. In 1785, the prizes were paid in money, and the tickets sold at a profit to the public; and this method has been adhered to in all the lotteries since.

The profit which the public draws from lotteries may be considered as a tax on the spirit of gaming, and added to the amount of the other taxes. In order to secure all that can be raised this way to the public, private lotteries are prohibited under heavy penalties. But a lottery was granted in 1758 for the benefit of the British Museum, and a few others have been granted since for private purposes.

Although the public creditor cannot demand payment of the capital debt, the mode of transferring it, even in small sums, is so conveniently ar-

arranged, and the dividends so regularly paid, that it is considered as an eligible property. The value of the funds is liable to considerable fluctuation. It depends chiefly upon the proportion between the interest they bear, and the profit which may be obtained by applying capital to other purposes. It is influenced by the plenty or scarcity of capital, and by the amount of the loan required at the time; and it is impaired by any event which threatens the safety, or weakens the credit of government. It is always much higher in time of peace than in time of war; and is affected by every event and even by every report, in time of war, favourable or unfavourable. False reports are frequently raised by designing people for that purpose.*

The manner of transacting loans was formerly by open subscription at the Bank of England. Terms were proposed by the public, and as these afforded a profit, the subscription of the sum required was generally filled up in a short time. If the terms offered were not judged sufficient, and consequently the subscription not filled up, others, more advantageous were offered afterwards.

For a considerable number of years, a mode of transacting loans still more favourable to the public has been adopted. The Chancellor of the Ex-

* See Note IV.

Exchequer fixes upon the funds in which the loan is to be made. These are often of different kinds, and not unfrequently a long annuity forms part of the emolument. He then gives public intimation that he is ready, on a certain day, to receive offers, and assign the loan to those who were willing to accept of the lowest terms. If a long annuity be a part of the proposed emolument, the other funds to be assigned to the lenders are fixed at a rate somewhat lower than the estimated value for each L.100 borrowed, and the bidding is on the long annuity, the loan being granted to those who will accept of the least annuity in addition to the capital offered. If the loan be in different funds, but without an annuity, the capitals in all the funds except one are previously fixed; and the bidding is on that fund, the loan being granted to those who will accept of the least capital. The Chancellor of the Exchequer is generally attended, at the time appointed, by several of the principal bankers in London, who deliver their offers sealed; and these being opened in their presence, the loan is assigned to the offerer who proposes the lowest terms. This method, since its adoption, has been conducted with the utmost impartiality, and, being a fair and open competition for the public benefit, has been uniformly ratified by Parliament. The only deviation from it since its first adoption, was in the loan of 1796, called the

Loyalty Loan, when the method of open subscription at the Bank was had recourse to.

The loans are always payable by instalments at different periods of the year. But the interest is payable on the whole from the first usual term of the fund in which the loan is made. Thus the lender receives interest for the whole of the first year, although he only advances the money on the days appointed for payment of the instalments; or if he advances the whole at first, he is allowed a suitable discount, and he derives part of his profit from these allowances; and, according to the terms of the loan, he is generally possest of several interests; so much perhaps in a 3 per cent. fund, so much in a 5 per cent. fund, so much in a long annuity, and formerly so much in lottery tickets. After the loan is compleated, these interests are assignable separately: But when the loan is in progress, they are all assignable together, and their united value is called *omnium**. In order to obtain a loan it is necessary that the value of *omnium* at the time should be above par. This difference, which generally amounts to 2 per cent. or upwards, is called the *bonus* to the lenders. Instances, however, have occurred, in which

* This term, of which the meaning is obvious, when it comprehends several interests, has also been applied, less properly, to the annuity granted to the public creditor in a single fund, as is sometimes the case during the progress of the loan.

which the price of *omnium* fell below par, before the loan was compleated. Lenders who do not pay their instalments at the appointed terms forfeit their subscriptions. The Bank of England not unfrequently lends its aid in advancing some of the instalments.

In the early part of the funding system, a separate account was kept of each loan, and of the tax imposed for payment of the interest. This method was afterwards found inconvenient, as the produce of some of the taxes fell short of the expected sum, while that of others exceeded it, and the multiplicity of funds produced confusion. This gave occasion, soon after the peace of Utrecht, to unite the various branches of the revenue into a few funds. The *Aggregate Fund* was established in 1715, and the *South-sea* and *General Funds* in the following year. To each of these Funds a variety of branches of revenue were appropriated, comprehending altogether the whole revenue existing at the time, except the land-tax and malt-tax of sixpence per bushel, and the branches then appropriated to the support of the civil government* : and each of them were charged with the payment of certain annuities then due by the public. The united surplus of these funds formed the basis of the sinking fund established in 1716, a particular account of which will be given afterwards.

* See Note V.

The greater part of the public debt is vested in funds bearing interest at the rate of 3 per cent. of the nominal capital. These, with a few exceptions, are now comprehended in two large funds called the 3 per cent. consolidated, and the 3 per cent. reduced. The first of these arose from the uniting of several funds, formerly kept separate, and many capitals created by subsequent loans have been since added to it. The other received its name from the reduction of the rate of interest of capitals which before were at 4 per cent. and to this also considerable capitals have been since added. The annuities in the 3 per cent. consolidated capital are payable on the 5th January and 5th July, and those on the 3 per cent. reduced, on the 5th March and 10th October.

The person possessed of the stock on the day of payment receives the interest for the half year preceding; and therefore, a purchaser during the currency of the half-year, has the benefit of the interest of the stock he buys, from the last term of payment to the time of transfer. The price of stock, therefore, rises gradually, *ceteris paribus*, from term to term; and, when the interest is paid, it undergoes a fall equal to the interest. Thus the 3 per cent. cons. should be higher than the 3 per cent. reduced, by ¼ per cent. from 5th April to 5th July, and from 10th October to 5th January; and should be as much lower from 5th January to 5th March, and from 5th July

July to 10th October; and this is nearly the case. Accidental circumstances may occasion a slight deviation.

The capitals bearing interest at 4 per cent. and at 5 per cent. (with an exception aftermentioned,) are now consolidated. The interest on the 4 per cents. is paid on the same days as that on the 3 per cent. reduced, and the interest on the 5 per cents. on the same days as that on the 3 per cent. consolidated.

The funded capital has also been increased in a manner different from loans. Exchequer and Navy Bills have been funded to a great extent: That is, instead of paying these bills, capital in one or more funds has been assigned to the holder, on such terms as they were willing to accept of.

When the Union between England and Scotland was accomplished in 1707, as Scotland was subjected, by the articles, to the payment of certain duties of customs and excise, then payable in England, and applicable to the debt of England contracted before the Union, it was agreed that the sum of L.398,085 should be granted by the Parliament of England as an equivalent for the same; and this sum was applied to the payment of the small public debt then due by Scotland, the indemnification of the losses sustained by the Darien Company, the improvement of Fisheries and Manufactures in Scotland, and some other public purposes.

The

The terms of the loans and amount of money borrowed, and capital funded, during the seven years war, were as follows* :

		Sums borrowed.	Capital funded.
1755	At 3 per cent. by lottery, - -	900,000	900,000
1756	At 3½ per cent. redeemable after 15 years, and redeemed in 1771, - - - -	1,500,000	1,500,000
	Also, at 3 per cent. by lottery,	500,000	500,000
1757	At 3 per cent. with an additional life annuity of L.1. 2s. 6d.	3,000,000	3,000,000
1758	At 3½ per cent. reduced in 1782 to 3 per cent. - - -	4,500,000	4,500,000
	Also, at 3 per cent. by lottery,	500,000	500,000
1759	At 3 per cent. allowing L.115 capital for L.100 borrowed,	6,600,000	7,590,000
1760	At 4 per cent. irredeemable for 20 years, and then reduced to 3 per cent. and allowing L.103 capital for L.100 borrowed,	8,000,000	8,240,000
1761	At 3 per cent. with an additional annuity of L.1. 2s. 6d. for 99 years, - - -	11,400,000	11,400,000
	Also at 3 per cent. by lottery,	600,000	600,000
1762	At 4 per cent. irredeemable for 19 years, and then reduced to 3 per cent. with an annuity of L.1 for 98 years, - -	12,000,000	12,000,000
1763	At 4 per cent. with the benefit of a lottery ticket, valued at L.10 for L.100 borrowed, -	2,800,000	2,800,000
	Also at 4 per cent. by lottery,	700,000	700,000
		53,000,000	54,230,000
	And, as the funded debt increased L.60,669,597 this war, there appears to have been added to the capital, by funding bills, about - -		6,439,597
			60,669,597

The

* See Note VI.

The loans during the American war were

	Sums borrowed.	Capital funded.
1776 At 3 per cent. allowing L.77. 10s. and 3 lottery tickets valued at L.10, prizes, funded in the 3 per cents. for L.100 borrowed, - - -	2,000,000	2,150,000
1777 At 4 per cent. with an additional annuity of 10s. for 10 years, - - - -	5,000,000	5,000,000
And subscribers entitled to the profit of a lottery ticket at L.10 for L.100 subscribed, prizes in the 4 per cents. which raised, - -	500,000	500,000
1778 At 3 per cent. with an annuity of L.2 10s. for 30 years, or for lives, - - -	6,000,000	6,000,000
Also the profit of 4 lottery tickets at L.10 for L.500 subscribed, prizes in the 4 per cents. which raised, -	480,000	480,000
1779 At 3 per cent. with an annuity of L.3. 15s. for 29 years, or for lives, - - -	7,000,000	7,000,000
Also, the profit of 7 lottery tickets at L.10 for L.1000 subscribed, prizes in the 3 per cents. which raised, -	490,000	490,000
1780 At 4 per cent. with an annuity of L.4. 10s. 3d. for 30 years,	12,000,000	12,000,000
Also, the profit of 4 lottery tickets at L.10 for L.1000 subscribed, prizes in the 4 per cents. which raised, -	480,000	480,000
	33,950,000	34,100,000
1781 At L.150 in the 3 per cents. and L.25 in the 4 per cents. -	12,000,000	21,000,000
Carried over, - -	45,950,000	55,100,000

		Sums borrowed.	Capital Funded.
	Brought over, -	45,950,000	55,100,000
	Also the profit of 4 lottery tickets at L.10 for L.1000 subscribed, prizes in the 3 per cents. which raised, -	480,000	480,000
1782	At L.100 in the 3 per cents. and L.50 in the 4 per cents. with an annuity of 17s. 6d. for 78 years, - -	13,500,000	20,250,000
	Also the profit of 3 lottery tickets, at L.10 for L.1000 subscribed, prizes in the 3 per cents. which raised, -	405,000	405,000
1783	At L.100 in the 3 per cents. and L.25 in the 4 per cents. with an annuity of 13s. 4d. for 77 years, - - - -	12,000,000	15,000,000
	Also the profit of 4 lottery tickets at L.10 for L.1000 subscribed, prizes in the 3 per cents. which raised, -	480,000	480,000
1784	At L.100 in the 3 per cents. and L.50 in the 4 per cents. with an annuity of 5s. 6d. for 75½ years, - - - -	6,000,000	9,000,000
	Also the profit of 6 lottery tickets at L.10 for L.1000 subscribed, prizes in the 3 per cents. which raised, -	360,000	360,000
		79,175,000	101,075,000
	And as the funded debt increased L.114,586,748 this war, there appears to have been added to the capital, by funding bills, about -		13,511,748
			114,586,748

The

The whole funded debt of Great Britain in 1786 was - - - - - - - - L.238,231,248

Annuities for terms of years or for lives, L. 1,193,674

At that time the Sinking Fund, now existing, was established, and part of the funded debt has been since annually redeemed. In order to exhibit a distinct view of this subject, we shall first state the progress and present amount of the funded debt, and charges on the same, without regard to the redemption; and then the extent of the redemption and the amount now unredeemed.

At the commencement of the war in 1793, the capital funded debt was the same as in 1786, and consisted of the following particulars:

3 per cent. Bank of England, - -	L.11,686,800
3 per cent. South Sea, - - - -	25,984,684
3 per cent. 1726, charged on the pension duty,	1,000,000
3 per cent. consolidated, - - -	107,399,696
3 per cent. reduced, - - - - -	41,540,073
Amount 3 per cents. - - - -	L.187,611,255
4 per cent. consolidated, - - -	32,750,000
5 per cent. consolidated*, - - -	17,869,993
Amount funded debt, - - - -	L.238,231,248
Interest on 3 per cents. - - - -	L.5,628,338
on 4 per cents. - - - -	1,310,000
on 5 per cents. - - - -	893,499
Amount Interest, - - - - -	L.7,831,837

Carried over,

L

* This Stock, which was at first instituted for funding Navy Bills, is sometimes called the Navy 5 per cents.

Brought over, - - -		L.7,831,837
And the annuities, to which some additions were made since 1786, were		
Short annuities which expire in 1805	L.53,655	
— — — in 1806	7,776	
— — — in 1807	14,892	
— — — in 1808	418,333	
	L.494,656	
Long annuities which expire in 1860,	704,740	
		1,199,396
Tontine 6 Geo. III. - - -	L. 540	
29 Geo. III. - - -	18,442	
	L.18,982	
Annuities for lives - - -	75,492	
		94,474
Besides the following annuities expired and transferred to the Commissioners for the redemption of the National Debt.		
Old long annuities, William and Mary,	L.54,881	
Annuities, 17 Geo. III. - - -	25,000	
	79,881	
Which added to the above - -	1,293,870	
makes up the sum stated by the Select Committee of Finance, in 1797,	L.1,373,751	
Management of capital debt, -	L.98,869	
of annuities, - -	17,258	116,127
Total Interest, annuities and management,		L.9,241,831

Since

Since the commencement of the war, loans have been contracted every year, and Exchequer and Navy Bills have been frequently funded. A part of most of the loans since 1797 has been for the use of Ireland, and in 1809 a part was for Portugal. Some loans have been transacted in Britain for Ireland, which though not connected with any British loan, are guaranteed by Britain, and the interest payable there. The particulars of these operations are as follows:

1793.

A. Loan, sum raised,		L.4,500,000
Sum funded at the rate of L.100 in 3 per cent. cons. for L.72 raised,		6,250,000
Interest,		187,500
Management L.450 per million,		2,812
Total charge,		190,312

1794.

B. Loan, sum raised,		L.11,000,000
funded at L.100, in 3 per cent. cons.		11,000,000
and L.25 in 4 per cent. cons.		2,750,000
Total funded,		13,750,000
Interest of 3 per cents.		330,000
of 4 per cents.		110,000
		440,000
And an annuity of 11s. 5d. for 66¼ years,		62,792
Management of capital, at L.450,	L.6,187	
and for long annuities,	706	
		6,894
Total charge,		509,686

C. Navy

C. Navy and victualling bills funded, amount	L.1,907,451
Sum funded at L.101 in 5 per cent. cons. -	1,926,526
Interest, - - - - - -	96,326
Management at L.450, - - -	867
Total charge, - - - - -	97,193
1795.	
D. Loan, sum raised, - - - -	L.18,000,000
Funded at L.100 in 3 per cent. cons. -	18,000,000
and L.33. 6s. 8d. in 4 per cent. cons.	6,000,000
Total funded, - - - -	24,000,000
Interest in 3 per cents. - - -	540,000
in 4 per cents. - - -	240,000
	780,000
And an annuity of 9s. 6d. for 65¼ years,	85,500
Management of capital, at L.450, L.10,800	
and for long annuities, 962	
	11,762
Total charge, - - - -	877,262
E. Navy and victualling bills funded, amount	L.1,499,647
Sum funded at L.105 in 5 per cent. cons.	1,609,898
Interest, - - - - -	80,495
Management, at L.450, - - -	724
Total charge, - - - -	81,219

F. Loan,

F. Loan, (Dec.) sum raised, - - -		L.18,000,000
Sum funded at L.120 in 3 per cent. cons. and L.25 in 3 per cent reduced, -		26,095,800
N.B. A deficiency by non-payment of		4,200
Interest, - - - - - - -		782,874
And an annuity of 6s. 6d. for 64¼ years, -		58,500
Management of capital at L.450	L.11,743	
and for long annuity,	658	
		12,401
Total charge, - - - - - -		853,775
1796.		
G. Loan. Sum raised, - - -		L.7,500,000
Sum funded at L.120 in 3 per cents. cons. and L.25 in 3 per cent. reduced, -		10,793,825
N.B. A deficiency by non-payment of		81,125
Interest, - - - - - - -		323,815
And an annuity of 5s. 6d. for 63¾ years, -		20,582
Management of capital at L.450,	L.4,857	
and for long annuities,	231	5,089
		349,486
H. Navy and victualling bills funded, amount		L.4,226,727
Of which L.2,398,927 { funded at L.104 in 5 per cent. cons. }		2,494,884
and 1,827,800 funded at L.105 in do.		1,919,190
4,226,727 according to their dates,		4,414,074

Interest,

Interest, - - - - - -	220,703
Management at L.450, - - - -	1,986
Total charge, - - - - -	222,689

I. Loyalty Loan.* (Dec.) Sum raised, L.18,000,000

Funded at 5 per cent. in a separate fund at L.112. 10s. - - - - -	20,124,843
N.B. A deficiency by non-payment of -	125,157
Interest, - - - - - -	1,006,243
Management at L.450, - - - -	9,056
Total charge, - - - -	1,015,299

1797.

K. Joint loan for Britain and Ireland, funded at £125 in 3 per cent. cons. £50 in three per cent. reduced, £20 in 4 per cent. cons. and an annuity of 6s. for 62¾ years.

	Britain.	Ireland.	Total.
Sums raised, - -	13,000,000	1,500,000	14,500,000
Sums funded in 3 per cents.	22,750,000	2,625,000	25,375,000
in 4 per cents.	2,600,000	300,000	2,900,000
Total funded, - -	25,350,000	2,925,000	28,275,000
Interest in 3 per cents.	682,500	78,750	761,250
in 4 per cents.	104,000	12,000	116,000
Amount Interest, - -	786,500	90,750	877,250
Long Annuities,	39,000	4,500	43,500
Management of capital at L.450, - - -	11,418	1,305	12,723
And for Long Annuities,	446	44	490
	837,364	96,599	933,963

* See Note VII.

L. Navy

L. Navy and Exchequer Bills funded *.

	Navy Bills.	Exch. Bills.	Total.
Amount bills, - -	11,595,529	1,433,870	13,029,399
Funded in 3 per cent cons.	16,438,175	1,999,699	18,437,874
in 4 per cent. cons.	765,428	104,432	869,860
in 5 per cent. cons.	2,034,890	270,202	2,305,092
Total funded, - -	19,238,493	2,374,333	21,612,826
Interest in 3 per cents. -	493,145	59,991	553,136
in 4 per cents. -	30,617	4,177	34,794
in 5 per cents. -	101,744	13,510	115,254
Amount, interest, - -	625,507	77,678	703,185
Management at L.450,	8,657	1,069	9,726
Total charge, - -	634,164	78,747	712,911

1798.

M. Joint loan for Britain and Ireland, funded at L.150 in 3 per cent. cons. L.50 in 3 per cent. reduced, and an annuity of 4s. 11d. for 61¼ years.

	Britain.	Ireland.	Total.
Sums raised, - -	15,000,000	2,000,000	17,000,000
Sums funded in 3 per cents.	30,000,000	4,000,000	34,000,000
Interest, - - -	900,000	120,000	1,020,000
Long Annuities, - -	36,875	4,916	41,791
Management of capital at L.450, - - -	13,500	1,800	15,300
And for long annuities, -	415	55	470
Total charge, - -	950,790	126,771	1,077,561

* See Note VIII.

N. Loan

N. Loan. [December.] Sum raised,	L.3,000,000
Sum funded at L.100 in 3 per cent. cons. and L.87. 9s. 6d. in 3 per cent. reduced, - -	5,624,250
Interest, - - - - - - - -	168,727
Management at L.450, - - - -	2,530
Total charge, - - - - - - -	L.171,257

1799.

O. Joint loan for Britain and Ireland, funded at L.125 in 3 per cent. cons. and L.50 in 3 per cent. reduced.

	Britain.	Ireland.	Total.
ums raised, - - -	12,500,000	3,000,000	15,500,000
Sums funded in 3 per cents,	21,875,000	5,250,000	27,125,000
Interest, - - -	656,250	157,500	813,750
Management at L450, -	9,843	2,362	12,205
Total charge, - -	666,093	159,862	825,955

1800.

P. Joint loan for Britain and Ireland, funded at L.110 in 3 per cent. cons. and L.50 in 3 per cent. reduced.

	Britain.	Ireland.	Total.
Sums raised, - - -	18,500,000	2,000,000	20,500,000
Sums funded in 3 per cents.	29,045,000	3,140,000	32,185,000
Interest, - - -	871,350	94,200	965,550
Management at L.450, -	13,070	1,413	14,483
Total charge, - -	884,420	95,613	980,033

1801.

Q. Joint loan for Britain and Ireland, funded at L.125 in 3 per cent. cons. and L.47 in 3 per cent. reduced.

	Britain.	Ireland.	Total.
Sums raised, - -	25,500,000	2,500,000	28,000,000
Sums funded in 3 per cents.	44,816,250	4,393,750	49,210,000
Interest, - - -	1,344,488	131,812	1,476,300
Management at L.450,	20,167	1,977	22,144
Total charge, - -	1,364,655	133,789	1,498,444

1802.

R. Exchequer bills funded at L.25 in 3 per cons. L.25 in 3 per cent. reduced, L.50 in 4 per cent. cons. L.25 in 5 per cents. joined to Loyalty Loan, and an annuity of 10s. 9d. for 58¾ years.

Amount bills funded, - - - -		L.8,910,450
Sum funded in 3 per cents, - - - -		4,455,225
in 4 per cents, - - - -		4,455,225
in 5 per cents. Loyalty Loan, -		2,227,612
		11,138,063
Interest in 3 per cents, - - - - -		133,657
in 4 per cents, - - - - -		178,209
in 5 per cents, - - - - -		111,381
		423,247
Long annuities, - - - - - -		7,796
Management of capital at L.450,	L.5,012	
And for long annuities, - -	87	5,099
Total charge, - - - - -		436,142

S—Joint

S. Joint Loan for Britain and Ireland, funded at L 65 in 3 per cent cons. L 60 in 3 per cent. reduced; and L 6 19s. 3d in 3 per cent. cons. the interest of which is deferred till the year 1808 *.

	Britain.	Ireland.	Total.
Sums raised, - -	23,000,000	2,500,000	25,500,000
Sums funded in 3 per cents	28,750,000	2,500,000	31,250,000
Besides stock deferred,	1,601,375	139,250	1,740,625
Total funded, - -	30,351,375	2,639,250	32,990,625
Present interest, - -	862,500	75,000	937,500
Deferred interest, - -	48,041	4,178	52,219
Total interest, - -	910,541	79,178	989,719
Management, - -	12,937	1,125	14,062
Amount present interest and management,	875,437	76,125	951,562

1803.

T. Joint loan for Britain and Ireland, funded at L 80 in 3 per cent cons. L 80 in 3 per cent. reduced, and an annuity of 6s. 5d. for 56¼ years.

	Britain.	Ireland.	Total.
Sums raised, - -	10,000,000	2,000,000	12,000,000
Sums funded in 3 per cents.	16,000,000	3,200,000	19,200,000
Interest, - - -	480,000	96,000	576,000
Long annuities, - -	32,083	6,417	38,500
Management of capital at L 340, - - - -	5,440	1,088	6,528
And for Long annuities,	273	54	327
Total charge, - -	517,796	103,559	621,355

* See Note IX.

1801.

1804.

U. Joint Loan for Britain and Ireland, funded at L.100 in 3 per cent. reduced, and L.82 in 3 per cent. cons.

	Britain.	Ireland.	Total.
Sums raised,	10,000,000	4,500,000	14,500,000
Sums funded in 3 per cents.	18,200,000	8,190,000	26,390,000
Interest,	546,000	245,700	791,700
Management, at L 3 10,	6,188	2,785	8,973
Total charge,	552,188	248,485	800,673

1805.

V. Joint Loan for Britain and Ireland, funded at L.150 in 3 per cent. cons. and L 22 in 3 per cent. reduced.

	Britain.	Ireland.	Total.
Sums raised,	20,000,000	2,500,000	22,500,000
Sums funded in 3 per cents.	34,400,000	4,300,000	38,700,000
Interest,	1,032,000	129,000	1,161,000
Management at L.3 10,	11,696	1,462	13,158
Total charge,	1,043,696	130,462	1,174,158

W. A separate loan for Ireland in Britain, funded at L.24 in 5 per cent. cons. and an annuity of L.5 for 34 years.

Sum raised,		L.1,200,000
Sum funded in 5 per cent. cons.		360,000
Interest,		18,000
Long annuities,		75,000
Management of capital at L.3 10	L.122	
and for long annuities,	638	760
Total charge,		93,760

1806.

X. Joint loan for Britain and Ireland, funded at L.100 in 3 per cent. cons. and L.66 in 3 per cent. reduced:

	Britain.	Ireland.	Total.
Sums raised, -	18,000,000	2,000,000	20,000,000
Sums funded in 3 per cents.	29,880,000	3,320,000	33,200,000
Interest, - -	896,400	99,600	996,000
Management at L.340,	10,159	1,129	11,288
Total charge, -	906,559	100,729	1,007,288

1807.

Y. Joint Loan for Britain and Ireland, funded at L.70 in 3 per cent. cons. L.70 in 3 per cent. reduced, and L.10 12s. in 5 per cent. cons*.

	Britain.	Ireland.	Total.
Sums raised,	12,000,000 200,000	2,000,000	14,200,000
Sums funded in 3 per cents. -	16,800,000 280,000	2,800,000	19,880,000
In 5 per cents.	1,272,000 21,200	212,000	1,505,200
Total funded,	18,373,200	3,012,000	21,385,200
Interest in 3 per cents.	504,000 8,400	84,000	596,400
in 5 per cents.	63,600 1,060	10,600	75,260
Total interest,	577,060	94,600	671,660
Management at L.340.	6,145 102	1,024	7,271
Total charge,	583,307	95,624	678,931

Z. A separate loan for Ireland in Britain,

Sum raised, - - - - - - - L.1,500,000

Sum funded at L.160. 12s. 10d. in 3 per cent cons. 2,409,265

* See Note X.

Interest

Interest,	72,289
Management at L.340,	819
Total charge,	73,108

1808.

A. Joint loan for Britain and Ireland, funded at L.118. 3s. 6d. in 4 per cent. cons.

	Britain.	Ireland.	Total.
Sums raised,	8,000,000	2,500,000	10,500,000
Sums funded in 4 per cents.	9,454,000	2,954,375	12,408,375
Interest,	378,160	118,175	496,335
Management at L.340,	3,214	1,004	4,218
Total charge,	381,374	119,179	500,553

B. Exchequer Bills funded.

Bills funded at L.105 in 5 per cents.	L.3,524,200
Bills funded at L.63 in 5 per cents. And L.50 in 4 per cents.	475,820
Amount Bills,	4,000,000
Sums funded in 5 per cent. cons.	L.3,700,410
And,	300,944
	4,001,354
Sum funded in 4 per cent. cons.	237,900
Total funded,	4,239,254
Interest at 5 per cent.	200,068
at 4 per cent.	9,516
Total interest,	209,584
Management at L.340,	1,441
Total charge,	211,025

Interest

Interest of part of the loan of 1802, deferred till this year; see Note IX. - - - - L.48,041

1809.

C. Joint loan for Britain, Ireland, and Portugal, funded at L.60 in 3 per cent. reduced, L.60 in 4 per cent. cons. and an annuity of 8s. 10d. for 50¾ years*.

	Britain.	Ireland.	Portugal.	Total.
Sums raised, - -	11,000,000	3,000,000	600,000	14,600,000
Sums funded in 3 per cts.	6,064,478	1,800,000	895,522	8,760,000
in 4 per cts.	6,960,000	1,800,000		8,760,000
Total funded, - -	13,024,478	3,600,000	895,522	17,520,000
Interest at 3 per cent.	181,934	54,000	26,866	262,800
at 4 per cent.	278,400	72,000		350,400
Total interest, - -	460,334	126,000	26,866	613,200
Long annuities,	51,233	13,250		64,483
Management, -	4 864	1,337	304	6,505
Total charge, - -	516,431	140,587	27,170	684,188

D. Exchequer Bills funded†.

Bills funded at L.103 5s. in 5 per cents. -		L6,483,200
Bills funded at L.81 8s. in 5 per cents. And L.26 5s. in 4 per cents.	-	1,448,900
Amount Bills funded, - - - -		7,932,100
Sums funded in 5 per cent. cons. - -		L.6,693,904
And, - -		1,179,404
		7,873,308
Sum funded in 4 per cent. cons. - - -		380,336
Total funded, - - - - -		8,253,644

* See Note XI. † See Note XII.

Interest

Interest in 5 per cents. - - - - -	393,665
in 4 per cents. - - - - -	15,214
Total interest, - - - - - - -	L.408,879
Management at L.340, - - - - - -	2,806
Total charge, - - - - - - -	411,685

1810.

E. Exchequer Bills funded.

Amount Bills funded at L.103. 5s. in 5 per cent. cons. - - - - - - -	L.8,311,000
Sum funded, - - - - - -	8,581,108
Interest at 5 per cent. - - - -	429,055
Management, L.340 and L.300, - - -	2,017
Total charge,	431,972

F. Joint loan for Britain and Ireland, funded at L.130 in 3 per cent. reduced, and L.10. 7s. 6d. in 3 per cent. cons.

	Britain.	Ireland.	Total.
Sums raised, - -	8,000,000	4,000,000	12 000,000
Sums funded in 3 per cents.	11,230,000	5,615,000	16,845,000
Interest, - - -	336,900	168,450	505,350
Management, - -	3,818	1,909	5,727
Total charge, - -	340,718	170,359	511,077

A separate loan for Ireland in Britain, funded at L.130 in 3 per cents. reduced, and L.107 in 3 per cent. cons.

Sums raised, - - - - - - - -	L.1,400,000
Sums funded in 3 per cents. - - -	1,965,250
Interest, - - - - - - - -	58,957
Management, - - - - - - -	668
Total charge,	59,623

1811.

H. Exchequer Bills funded.

Amount Bills funded at L.103. 14s. in 5 per cent. cons. - - - - - - - -	L.7,018,700
Sum funded, - - - - - - - -	7,278,392
Interest at 5 per cent. - - - -	363,919
Management, - - - - - - - -	2,385
Total charge,	366,304

I. Loan to compleat L.12,000,000.

Sum raised, - - - - - - - -	L.4,981,300
Sum funded in 5 per cent. cons. at L.72 for L.70 raised, - - - - - -	5,166,319
Interest, - - - - - - - -	258,316
Management, - - - - - - - -	1,500
Total charge,	259,816

K. Loan

K. Loan of L.12,000,000, of which L.4,500 is for the service of Ireland. But as Britain is engaged to pay the interest, the whole is charged to the account of Britain.

Sum raised, - - - - - - -	L.12,000,000
Sums funded at L.100 in 3 per cent. reduced,	L.12,000,000
And L 20 in 3 per cent. cons.	2,400,000
	14,400,000
And L.20 in 4 per cent. cons.	2,400,000
Total funded, - - - - - -	16,800,000
Interest at 3 per cent. - - - -	432,000
at 4 per cent. - - - -	96,000
Total interest, - - - - -	528,000
Annuity for 49¼ years at 6s. 11d. - -	41,500
Management, - - - - -	5,392
Total charge,	574,892

In 1809, an option was given to the holders of the 3 per cent. capital, to convert their perpetual annuities into life annuities, at certain rates, according to the age of the annuitant. In consequence of this, L.1,606,040 of the 3 per cent. capital was converted into life annuities before 5th January, 1812, amounting to L.112,427. These annuities were charged on the sinking fund, and the dividend discharged by the extinction of the capital, amounting to L.48,181, applied to that fund.

An abstract of all these operations, together with the amount of the public debt, and the charge on the same at the commencement of the war, 1793; at the Peace of Amiens, 1802; and on the 1st February 1812, is exhibited in Table II.

It appears that the amount of the funded debt of Britain at the Peace of Amiens, was,

In the 3 per cents. - - - -	£467,105,854
In the 4 per cents. - - - -	49,425,085
In the 5 per cents. - - - -	50,478,039
Amount of funded capital,	£567,008,978
Interest on above, - - - - -	£18,466,040
Annuities for years or lives, - - -	1,604,915
Charges of management, - - -	266,870
Amount of annual charge,	L 20,337,825

And on the 1st February 1812, the amount of funded debt was,

In the 3 per cents. - - - -	L.620,180,525
In the 4 per cents. - - - -	68,857,321
In the 5 per cents. - - - -	80,726,510
Amount of funded capital,	L.769,764,356
Interest on above, - - - - -	L.25,396,034
Annuities for years or lives, including those granted in place of 3 per cent. capital, converted *, - - - - -	1,318,421
Charges of management †, - - -	211,273
Amount of annual charge,	L 26,925,728

IRISH FUNDED DEBT.

We have already noticed that part of the loans annually made in Britain since 1797, has been for the use of Ireland; and several separate loans have also been made in Britain for Ireland. The

* See Note XIII. † See Note XIV.

The interest and other charges on these loans is annually remitted from the treasury of Ireland to the British treasury.

Table IV. contains a state of the sums raised by these loans, and the capitals funded in the three per cents. 4 per cents. and 5 per cents.; the total capital funded each year; the amount of the Irish debt payable in Britain at the end of each year: also, the interest, annuities, and charges of management, contracted by each loan.

It appears that the whole sum raised in Britain for Ireland, to 1st February 1812, is, - - - - L.39,900,000

The capital funded in the 3 per cents. - -	L.55,647,875
in the 4 per cents. - -	5,054,375
in the 5 per cents. - -	572,000
Amount capital funded in Britain for Ireland,	L 61,274,250
Interest of Irish debt funded in Britain, - -	L,1,900,211
Annuities which terminate in 1860, - -	104,083
Charges of management, - - - -	21,717
	L.2,026,011

Besides this, L.4,500,000, part of the loan raised in Britain in 1811, was for the use of Ireland; for which there was funded L.5,400,000, in the 3 per cents.; L.900,000 in the 4 per cents.; and a long annuity granted of L.15,562; but the interest of this being paid by Britain, it is not stated in the account of the Irish debt.

But this is only part of the Irish funded debt. Another part has been funded in Ireland, the interest of which is payable, and the capital redeemable there.

The progress of the whole Irish funded debt is exhibited in Table V

		Irish currency *.
The sum raised from 1773 to 5th January 1811, is		L.64,682,850
Capital funded in London, as above,	L.61,274,250	
And a further sum in the 5 per cents. of - - -	1,900,000	
	L.63,174,250	
Amounting in Irish currency to - - -		L.68,438,771
Capital funded payable in Dublin.		
In 3½ per cents. - -	L.8,180,972	
In 4 per cents. - -	227,600	
In 5 per cents. - -	12,881,648	
Amount payable in Dublin, - - -		21,290,221
Whole Irish debt payable in London and Dublin,		L.89,728,992
Interest on Irish debt, - - - - - -		L.3,100,999
Annuities, - - - - - -		188,188
Management, - - - - - -		23,113
Whole charge on Irish debt,		L.3,312,300

By the articles of Union between Britain and Ireland, which took effect 1st January 1801, the debts of each country, existing at that time, and their interest, are to continue as separate charges on the revenues of the respective countries; and such future expenses as are for the special service of either country, are to be charged on the revenue of the same: But the general charges for the army, navy, &c. being alike for the defence or advantage of each country, are appointed to be charged in the proportion of 15 seventeenths to Britain, and two seventeenths to Ireland.

* L.12. of British currency at par, is equal to L.13. Irish: But in the actual rate of exchange, the difference is often greater.

IMPE-

IMPERIAL LOANS.

Two loans have been raised in Britain for the Emperor of Germany, and guaranteed by the British government. The interest, if not provided by the Emperor, (and he has never made any provision,) to be paid from the consolidated fund at the same time as that of the 3 per cent. consols. The money for these loans was advanced by the subscribers to the British loans, in proportion to their subscriptions. The particulars are,

Loan of 1795, contracted as a capital of L.83. 6s. 8d. in a fund at 3 per cents. for L.100. advanced, and an annuity of L.5. for 25 years.

Loan of 1797, at a capital of L 226 10s. in a 3 per cent. fund, for each L.100 advanced.

Year	Sum raised.	Funded at 3 per cent.	Interest.	Annuity.	Management.	Total charge.
1795	4,600,000	3,833,333	115,000	230,000	4,312	349,312
1797	1,620,000	3,669,300	110,079		1,651	111,730
	6,220,000	7,502,633	225,079	230,000	5,963	461,042
					1,458	1,458
			Reduction in management,		4,505	459,584

LOAN TO PORTUGAL.

A LOAN of L.600,000 for the service of Portugal, was raised and guaranteed by Britain in 1809, and connected with the loan of that year, in the manner explained in Note XI.

The sum funded in the 3 per cent. reduced, was,	L 895,552
Interest, - - - - -	L.26,865
Management, - - - -	304
Annual charge, (besides sinking fund of L.30,000,)	L.27,170

MANAGE-

MANAGEMENT OF THE NATIONAL DEBT.

THE management of the national debt is conducted by the Bank of England, except a small part which is in the hands of the South Sea Company. The expence of management, in most articles, previous to 1786, was at the rate of L.562. 10s. per million of capital, whether of a three, four, or five per cent. annuity, reckoning L.40,000 of terminable annuities, equal to a million of capital.

In 1786, the rate of management was reduced to L.450 per million; and this was confirmed by an act of parliament in 1791.

In 1808, the rate of management was further reduced, and settled on the following terms:

L.450 per million, if the capital exceeded 300 millions, but fell below 400 millions.

L.340 per million, if the capital exceeded 400 millions, but fell below 600 millions.

L.300 per million on such part of the public debt as exceeded 600 millions.

No agreement was made for the case of the public debt falling below 300 millions.

It was farther agreed that the Bank should advance, without interest, L.500,000, in addition to L.376,739, formerly advanced, in consideration of a large sum of unclaimed dividends always remaining in their hands.

Besides these allowances for management, the Bank receives considerable sums for conducting loans and lotteries.

SECTION II.

Plans adopted for the reduction of the Funded Debt, and their Operation.

§ 1. SIR ROBERT WALPOLE'S SINKING FUND.

THE first plan for the discharge of the national debt, formed on a regular system, and conducted for some time with a considerable degree of firmness, was that of the Sinking Fund, established in 1716, under the administration of Sir Robert Walpole. The taxes which had been laid on before for limited periods, being rendered perpetual, and distributed among the *South Sea, Aggregate, and General Funds*, as has been mentioned already, and the produce of these funds being greater than the charges upon them, the surplusses were united under the name of the *Sinking Fund*, being appropriated for the discharge of the national debt. The legal interest had been reduced from six to five per cent. above two years before, and as that reduction was conformable to the commercial state of the country, Government was now able to obtain the same reduction on the interest of the public debt, and apply the savings in aid of the sinking fund. In 1727, a further reduction of the interest of the public debt from five to four per cent. was obtained, by which nearly £400,000 was added to the sinking fund. And

in

in the year 1749, the interest of part of the debt was again reduced to three and a half per cent. for seven years, and to three per cent. thereafter; and in 1750, the interest of the remainder was reduced to three and a half per cent. for five years, and to three per cent. thereafter, by which a further saving of near £600,000, was added to the sinking fund.

The opinion, strongly urged since by Dr. Price, seems to have been entertained at that time, of the importance of applying the produce of the sinking fund invariably to the discharge of the national debt, and borrowing by new loans when the public exigencies required it. Accordingly, the following sums were borrowed towards the supplies, from 1718 to 1731, being a period of peace.

In 1718,	—	—	£505,995
1719,	—	—	312,737
1720,	—	—	500,000
1721,	—	—	1,000,000
1725,	—	—	500,000
1726,	—	—	370,000
1727,	—	—	1,750,000
1728,	—	—	1,230,000
			6,168,732
1729	—	—	550,000
1730	—	—	1,200,000
1738	—	—	500,000
			£8,418,732

The

The sums applied from the sinking fund to the discharge of the national debt, from 1716 to 1728, amounted to £6,648,000, being a very little more than the additional debt contracted in that time.

In 1728, the sinking fund was charged with the interest of the loan, and this was also done in the loans of the following years, and the additional taxes imposed for the payment of the interest of the loans, were applied directly to that fund.

Soon after, the plan of preserving the sinking fund inviolate, and borrowing by new loans, was abandoned. In 1733, L.500,000 was taken from the sinking fund towards the supplies of the year. In 1734, L.1,200,000 was taken from it for the same purpose; and in 1735, it was anticipated and mortgaged. Since that time, the operations of the sinking fund, in time of peace, have been feeble, its produce being often diverted to other purposes: and at that time, the nation had no other free revenue, except the annual land and malt taxes, which were inadequate to the expense of a peace establishment on the most moderate scale. It was therefore necessary to have recourse to the sinking fund, or to the inefficient system of discharging old debts and contracting new ones. In the peace which followed the treaty of Utrecht, being a period of 26 years, the longest which the nation ever enjoyed, the amount of debt discharged was only L.7,328,355. In time of war, its produce was applied to the ser-

vice of the year, and loans only made for the additional sums wanted.

The produce of the sinking fund at its commencement, in 1717, was - - L.323,439

Medium annual produce from 1717 to

1726, both inclusive, - - -	577,614
1727 to 1736, - - - -	1,132,251
1737 to 1746, - - - -	1,062,170
1747 to 1756, - - - -	1,356,578
1757 to 1766, - - - -	2,059,406
1767 to 1776, - - - -	2,584,250

It seems unnecessary to trace the operations of this sinking fund further. It was continued nominally in the accounts of the exchequer, until the establishment of Mr. Pitt's sinking fund in 1786, but did little in time of peace, and nothing in time of war, to the discharge of the national debt. Dr. Price says, that at the time he wrote, in 1772, it had afforded about 20 millions towards the payment of the national debt in 56 years, being nearly L.357,000 annually, at an average. If from this sum of 20 millions, we subtract the debt contracted from 1716 to 1728, the remainder is nearly equal to the debts discharged in the periods of peace which followed the treaties of Utrecht and Aix-la-Chapelle.

§ 2. MR. PITT'S SINKING FUNDS.

1786.

THE present sinking fund was established under Mr. Pitt's administration, in 1786. The various branches of revenue then existing, were united under the name of the consolidated fund*. One million taken from that fund, was vested annually in the hands of commissioners for the redemption of the national debt, to be applied for purchasing capital in such stocks as they should judge expedient, at the market prices. To this fund was to be added, the interest of the debt redeemed, and annuities fallen in by the failures of lives, or the expiry of the terms for which they were granted. When this fund amounted to four millions, it was enacted that the interest of the redeemed debt, and annuities fallen in, were no longer to be applied to it, but remain at the disposal of Parliament.

1792.

Another sinking fund was established this year, of one per cent. on the nominal capital of each loan, to which the dividends on the capital redeemed by this fund, were to be added. When annuities for a longer term than forty-five years, or for lives were granted, the value which would remain after forty-five years, was appointed to be

 estimated,

* See Note XV.

estimated, and one per cent. on that value set aside for their redemption. This fund was appointed to be kept separate, and applied for the redemption of the debts contracted subsequent to its institution, by which means it was estimated that every loan would be redeemed in forty-four years * from its contraction.

In the same year, L.400,000 was granted in aid of the former sinking fund, and L.200,000 was granted by annual acts for the same purpose, till 1802, when the grant was rendered perpetual. Savings by reduction of the rate of interest of the national debt, were appointed to be added to that sinking fund.

1798.

This year, the application of one per cent. on the capital of the loans to the sinking fund, was deviated from. A part of the loan, (16 millions capital,) was charged on a tax then imposed, called the aid and contribution tax; for which the income tax was substituted the following year. In like manner, a part, or the whole of the loans for several years, was charged on the income tax, and no sinking fund of one per cent. provided for their redemption. The amount of capital for which no sinking fund of one per cent. was provided, is L.86,796,375. This system was abandoned in 1802, when all the loans were united, and

* See Note XVI.

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and the interest of these loans charged on the consolidated fund.

1802.

The two sinking funds were united, applicable to the discharge of debts existing in 1802; and the system of a sinking fund of one per cent. on loans subsequent to 1802, was revived, and has been followed in all the loans since, except that of 1807, when Lord Henry Petty's system was adopted. The limitation of the sinking fund to four millions, enacted at its commencement, and a similar limitation in 1792, were repealed; and the application of annuities whose term was expired, and of savings by the reduction of the rate of interest to the sinking fund, was repealed.

Table VI. contains a state of the loans from 1793, distinguishing those that were charged and those that were not charged with the sinking fund of one per cent. and the present amount of that fund.

§ 3. LORD HENRY PETTY'S SINKING FUND.

A NEW plan of finance was proposed to Parliament in 1807, by Lord Henry Petty, (now Marquis of Lansdown,) Chancellor of the Exchequer, and adopted in the arrangement of the loan for that year.

The annual expenditure during war, was estimated at L.32,000 beyond what the surplus of the

the consolidated fund, and the annual taxes, could supply. The war taxes were estimated at 21 millions, viz. property tax, L.11,500,000, and other articles L.9,500,000. The annual deficiency to be supplied by loan, was therefore 11 millions, which were proposed to be raised by mortgaging the war taxes to the extent of ten per cent. on the sum borrowed; the surplus of which sum mortgaged, after paying for interest and management, was to form a sinking fund for redeeming the debt, and thereby disengaging the part of the war taxes mortgaged in a certain number of years, according to the rate of interest at which the loan was transacted. Thus if the interest and management was five per cent. there would remain five per cent. as a sinking fund, and this would pay off the debt in fourteen years. The sums proposed to be borrowed in this manner, were 12 millions for the first three years, 14 millions for the fourth, and 16 millions for each of the succeeding ten years, amounting altogether to 210 millions, for which, at the rate of ten per cent. the whole of the war taxes would be mortgaged: But the debt contracted the first year being now paid off by the sinking fund appropriated to it, the portion of the war taxes mortgaged for it would be set free, and be applicable to the loan of the following year; and another portion being set free the following and each succeeding

year,

year, these loans might be continued on this system without limitation of time.

But as the sums mortgaged for these loans were withdrawn from the war taxes, it was necessary to replace the same; and this was proposed to be done by raising supplementary loans, the annual amount of which would be equal to the sum mortgaged, deducting the excess of the war tax loan for the year, above the sum of L.11,000 wanted.

Thus the first year, the sum borrowed, is,

- - - - - - - -	L.12,000,000
Of which required, - - -	11,000,000
Excess,	L.1,000,000
Portion of war taxes mortgaged,	L.1,200,000
Deduct above excess,	1,000,000
Sum to be raised by supplementary loan, first year, - - -	L.200,000

The second year an equal portion of the war taxes is mortgaged, amounting together with the former, to - - - - - - L2,400,000

Deduct excess of loan as before,	1,000,000
Sum to be raised by supplementary loan, second year, - -	L.1,400,000

In

In this manner, the supplementary loan of the fourteenth year, would amount to 16 millions, and the amount of these loans for fourteen years, to L94,200,000. In the fifteenth year, it would amount to 20 millions, which sum it would never exceed, and never fall below 16 millions. In twenty years, the amount of these loans would be L.204,200,000; and in each period of fourteen years after the first, the amount of supplementary loans would be 238 millions.

A sinking fund of one per cent. on the nominal capital, supposed funded in the three per cents. at 60, and therefore equal to 1-60th of the sum borrowed, was, agreeably to the system of 1792, to be added to the interest of these supplementary loans: and this charge to be provided for by imposing new taxes. It was proposed to diminish the amount of these taxes, or to supersede them altogether, by taking aid from the falling in of annuities, and from the surplus of the present sinking fund, after the amount of the same should exceed the interest of the debt remaining unredeemed. This surplus was expected to become available in the year 1817.

If a larger sum than 11 millions was required for the service of any year, it was to be raised by other arrangements.

As the ministry who planned this system, did not continue long in office, it was never followed out after the first year. Its merits will be considered afterwards.

§ 4.

§ 4. REDEMPTION OF THE NATIONAL DEBT BY THE PURCHASE OF THE LAND TAX.

TAXES in various forms have been frequently but not permanently imposed on land in England, from a very remote time. The present land tax commenced in 1692, when a valuation of the land was made, and although considerably below the real value at the time, it afforded a revenue of about L.500,000, at one shilling per pound, including a like tax upon personal property, estimated at a very low rate. The valuation made at that time has never been altered; and the tax has been imposed annually till 1798, sometimes at one shilling, sometimes at two shillings, sometimes at three shillings, most frequently at four shillings, which rate it has never exceeded. This tax was long considered as a heavy burthen, and much resisted by the landed interest. Of late years it has been less regarded, partly from the increasing influence of the mercantile interest, and partly from its becoming, in consequence of the increase of the rent of land, the deterioration of the value of money, and the general magnitude of our taxes, comparatively an inferior object.

In 1798, the land tax was rendered perpetual at four shillings per pound, and the proprietors were empowered to purchase the sums charged on their estates for capital in the three per cents. affording an equal dividend. If they did not ac-

cept this offer within a limited time, it might be sold to others for capital affording a dividend of one-fifth more than the tax purchased. The term for purchase has been since extended, and various regulations enacted, which it is unnecessary here to detail. In consequence of these enactments, L.23,941,057 capital in the three per cents. was transferred to the commissioners for the reduction of the national debt, before 1st February 1812, and L.718,232 deducted from the dividends on the same.

This plan is in effect no other than a transfer of part of the capital of the funded debt from the former stockholders to the landed proprietors. These last pay a value for the capital with which they redeem their land tax, and their relief from that tax is equivalent to their receiving a dividend to the same extent. The landholders may still be considered as subjected to the land tax at its highest rate; though some of them pay it by drawing a dividend for capital in the funds, which they have purchased for value. The public revenue may still be considered as drawing the whole of the land tax, and paying the whole of dividends. Could the portions of other taxes payable by particular classes of men be ascertained, it might as well be proposed to them to purchase an exemption from these taxes. Such of them as were able might embrace the offer, and after they had paid the value and received their exemption,

exemption, they would be exactly in the same circumstances as if they had purchased capital in the funds, drawn their dividends, and applied them in payment of taxes. The public, in like manner, would lose in taxes what they saved in dividends. We cannot, therefore, consider the part of the national debt redeemed by the purchase of the land tax as affording any relief to the public burthens.

It has always been considered as necessary, upon the principles of the British constitution, that part of the taxes should be granted annually by Parliament as a restraint on the power of the crown. The land and malt taxes, producing about L.2,700,000 annually, were formerly reserved for this purpose. Since the land tax was rendered perpetual, certain duties on sugar and tobacco, and on offices, pensions, and salaries, have been granted annually, together with the malt tax. The average annual amount of these taxes for three years preceding 5th January 1812, was L.4,865,058.

§ 5. OPERATION OF THE SINKING FUNDS.

THE amount of money applied for the redemption of the national funded debt, and of capital and interest redeemed since the commencement of the sinking fund in 1786, to 1st February 1812, and the produce of the sinking fund at that time are as follows:

	Sums expended	Capital redeem.	Interest redeem.
3 per cents.	114,491,454	181,600,080	5,448,002
4 per cents.	6,586,934	7,796,400	311,856
5 per cents.	126,998	142,000	7,100
	121,205,387	189,538,480	5,766,958
Converted for life annuities,		1,606,040	48,181
		191,144,520	5,815,139
Transferred for purchase of land tax,		23,941,057	
		215,085,577	

Permanent annual grant to sinking fund, - -	1,000,000
Additional permanent annual grant, - -	200,000
Amount of 1 per cent. sinking fund. Table VI.	4,332,255
Sinking fund, 1807, on Lord Henry Petty's plan,	626,255
Annuities, the term of which is expired, - -	79,880
Life annuities, fallen or unclaimed, - - -	51,711
	12,105,242
Deduct life annuities granted for capital, - -	112,427
Amount sinking fund, 1st February 1812, -	11,992,814

The 3 per cents. were redeemed nearly at 63 at an average.
The 4 per cents. at 84.
The 5 per cents. at 89.

Funded debt, 1st February 1812, - - -	L.771,370,396
Redeemed by sinking fund, as above, - -	189,538,480
	581,831,916
Converted into life annuities, - - -	1,606,040
	580,225,876
Transferred for purchase of land tax, - -	23,941,057
Unredeemed debt of Britain, 1st February 1812,	L.556,284,819

Which debt was invested as follows:

Bank annuities, - - - - - -	L.11,686,800
Loan of 1726 charged on pension duty, - -	1,000,000
South Sea annuities, 1751, - - - -	16,507,684
Carried over,	L.29,194,484

3 per

Brought over,		L.29,194,485
3 per cent. consolidated,		308,040,196
3 per cent. reduced,		77,404,706
Amount 3 per cents.		L.414,639,387
4 per cent. consolidated,		61,060,921
5 per cent. consolidated,	L 78,861,223	
5 per cent. Loyalty Loan,	1,723,287	
Amount 5 per cents.		80,584,510
		L.556,284,819

Table III. contains the amount of the capital funded debt each year*, the amount redeemed each year, and the balance, or difference between the capital funded, and the capital redeemed; also the whole funded debt existing each year, without regard to redemption; the whole debt redeemed, and the whole debt unredeemed. But this gives an imperfect view of the progress of the public debt; for the loan of the year is perhaps made in the five per cents. and the redemption in the three per cents.; and therefore if the capitals only be exhibited, the debt redeemed will appear more in proportion to the debt contracted than it really is. Therefore, other columns are inserted, exhibiting the value of the capital funded, the capital redeemed, and the balance reduced to 3 per cents; the reduction of the capital being made in proportion to the

* See Note XVII.

the rate of interest, when the loan is wholly or partially funded at a higher rate than 3 per cent*.

If the whole of the present funded debts were reduced to three per cents. the amount would stand as follows:

3 per cents. - - - -	L.414,639,387
Value of L.61,060,921—4 per cts.	81,414,561
80,584,510—5 per cts.	134,307,516
	L.630,361,464
Besides capital transferred for land-tax, - - - - -	23,941,057
	L.654,302,521

And if this be reduced to five per cents. or the sum for which it might be redeemed when the three per cents. are at 60, it comes, independent of the capital transferred for land tax, to - - - - - - - - - L.378,216,878

And including that capital, to 392,581,512

§ 6. IRISH, IMPERIAL, AND PORTUGUEZE SINKING FUNDS.

A SINKING fund for the redemption of the IRISH DEBT payable in Britain, was established in 1797, similar to the British one per cent. sinking fund of 1792.

The amount of this sinking fund, 1st February 1812, was,

1 per

* See Note XVIII.

1 per cent. on L.61,274,250, being the amount of the Irish debt payable in Britain, - - - - -		L.612,742
Sinking fund on long annuities, -		8,829
		£621,571
Dividend on L.9,085,958, redeemed at 3 per cent. - - - - -		272,578
Amount of sinking fund for Irish debt payable in Britain, 1st Feb. 1812,		L.894,150
Capital Irish debt payable in Britain, 1st February 1812, - -		L.61,274,250
Of which redeemed		
In 3 per cent. cons.	L.4,394,879	
In 3 per cent. reduced,	4,691,079	
		9,085,958
Unredeemed debt -		L.52,188,292

Besides L.104,083 annuities, which expire in 1860.
This capital is invested in the following funds.

3 per cent. cons. - - -	L.26,404,246
3 per cent. reduced, - -	20,157,671
4 per cent. cons. - - -	5,054,375
5 per cent. cons. - - -	572,000
	L.52,188,292

Which reduced to 3 per cents. amounts to - - - -	L.54,287,750
And to 5 per cents.	32,572,650

The

The sum paid for redeeming the above capital of L.9,085,958, was L.5,771,290, being above 63½ per cent. at an average.

Table IV. contains, besides the particulars formerly mentioned, the Irish debt payable in London redeemed each year, the total redeemed, and the balances remaining unredeemed each year.

There is also a sinking fund, established at the same time, for the redemption of the Irish debt payable in Ireland, which consists of a permanent grant of L.67,635, of a charge of one per cent. on loans payable in Ireland, of dividends on stock redeemed, and of annuities fallen in. The sum appropriated annually to the Irish sinking fund is L.100,000 Irish currency, of which L.32,365 is appropriated for the reduction of the debt borrowed in Britain for Ireland in 1797, and L.67,635 for the reduction of the remainder of the Irish debt.

The amount of capital debt payable in Ireland, redeemed on the 5th January 1811, was,

	Irish currency.
In 3½ per cents. - - -	L.2,195,386
In 5 per cents. - - -	1,776,875
	L.3,972,261
Which was redeemed for	L.3,223,196

And

And the sinking fund for the debt payable in Ireland, 5th January 1811, was,

1 per cent. on loans, &c. - -	L.287,640
Interest on debt redeemed,	165,682
	L.453,322

A sinking fund of one per cent. was charged on the IMPERIAL LOAN of 1797, being L.36,693 annually. There was no sinking fund for the loan of 1795. Now the amount of the two imperial loans was, - - - - - L.7,502,633

And the capital redeemed by the above sinking fund, 1st February 1812, - - - - - -	1,234,514
Imperial debt remaining 1st February 1812, - - - - -	L.6,268,119

The above debt was redeemed for L.750,138, being about 60¼ per cent. at an average.

The present imperial sinking fund consists of the abovementioned charge of 1 per cent. L.36,693

Dividend on L.1,234,514, redeemed at 3 per cent. - - - - - -	37,035
	L.73,728

The LOAN for PORTUGAL in 1809, was charged with an annual payment of L.30,000, in addition to the interest and charges of management, for its redemption.

The capital funded for that loan in the 3 per cent. reduced, was, - - - - L.895,522
Redeemed by the abovementioned annual payment, - - - - - 118,568

Remaining unredeemed, L.776,954

The above debt was redeemed for L.78,375, being about 66 per cent.

The present sinking fund is,
Annual appropriation, - - - - L.30,000
Dividend on L.118,568, redeemed, at 3 per cent. - - - - - - 3,557

L.33,557

RECAPITULATION.

By collecting the particulars above detailed, the state of the funded debt, due or guaranteed by Britain, on the 1st February 1812, appears as follows:

	3 per cents.	4 per cents.	5 per cents.	Total.
Amount funded.				
British debt, - - -	621,786,565	68,857,321	80,726,510	771,370,396
Of which converted into life annuities, - -	1,606,040			1,606.040
	620,180,525			769,764,356
Irish debt, - - -	55,647,875	5,054,375	572,000	61,274 250
Imperial debt, - -	7,502,633			7,502,638
Portuguese debt, - -	895,522			895,522
	684,226,555	73,911,696	81,298,510	839,436,761
Of which redeemed by sinking funds.				
British, - -	181,600,080	7,796,400	142,000	189,538,480
Irish, - - -	9,085,958			9,085,958
Imperial, - -	1,234,514			1,234,514
Portuguese, - -	118,568			118,568
	192,039,120	7,796,100	142,000	199,977,520

	3 per cents.	4 per cents.	5 per cents.	Total.
Remaining unredeemed by sinking funds.				
British, - - -	438,580,444	61,060,921	80,584,510	580,225,876
Irish, - - -	46,561,917	5,054,375	572,000	52,188,292
Imperial, - -	6,268,119			6,268,119
Portuguese, - -	776,954			776,954
	492,187,434	66,115,296	81,156,510	639,459,241
Transferred for land-tax,	23,941,057			23,941,057
	468,246,377	66,115,296	81,156,510	615,518,185

	Reduced to 3 per cents.	Reduced to 5 per cents.
British, (deducting capital transferred for land tax,)	630,361,724	378,217,034
Irish, - - - - - -	54,287,750	32,572,650
Imperial, - - - - -	6,268,119	3,760,871
Portuguese, - - - - -	776,954	466,172
	691,694,547	415,016,728

And the charge for interest, annuities, and management, is as follows:

	Interest.	Annuities.	Management.	Total.
On British debt, - -	25,444,215	1,206,174	281,667	26,932,056
Deduct from interest and management, and add to annuities, for stock converted, - - -	48,181	112,247	546	
	25,396,034	1,318,421	281,121	26,995,576
On Irish debt, - -	1,900,211	104,082	21,717	2,026,011
On Imperial debt, - -	225,079	230,000	4,505	459,584
On Portuguese debt, -	26,865		304	27,169
	27,548,189	1,652,504	307,647	29,508,340
Of which redeemed by sinking funds.				
British, - - -	5,766,958		61,709	5,828,667
Irish, - - -	272,578		3,089	275,667
Imperial, - -	37,035		419	37,454
Portuguese, - -	3,557		40	3,597
	6,080,129		65,257	6,145,386
Remaining unredeemed by sinking funds.				
British, - - -	19,629,076	1,318,421	219,412	21,166,909
Irish, - - -	1,627,633	104,083	18,628	1,750,341
Imperial, - -	188,044	230,000	4,086	422,130
Portuguese, - -	23,308		264	23,572
	21,468,061	1,652,504	242,390	23,362,955
Redeemed by purcha e of land-tax, - - -	718,232		8,139	726,371
	20,749,829	1,652,504	234,251	22,636,584

Such is the extent of the funded debt, due, or guaranteed by Britain, and the annual charge attending the same. It cannot now be doubted that the Imperial and Portuguese debt are as much a charge upon Britain as any part of its proper debt; and suspicions may be entertained that the Irish debt payable in Britain, or perhaps the whole Irish debt, will terminate in the same manner. In regard to this, it is premature at present to form a decided opinion.

SECTION III.

Unfunded Debt.

THERE is always a large sum, besides the funded debt, due by the British government. This may arise from any national expense for which no provision has been made, or the provision has proved insufficient, or not forthcoming at the time wanted. The forms of the unfunded debt are various; but the following are the principal branches.

I. EXCHEQUER BILLS. These are issued from the exchequer, in consequence of acts of Parliament, several of which are passed every session. They are made out for different sums, so low as £100, and most of them bear interest, generally at

at the rate of from 3d. to 3½d. per day; and being distributed among those who are willing to advance their value, they form a kind of circulating medium. After a certain time, they are received in payment of taxes, or other monies due to government; and the interest due on them at the time is allowed in the payment. They cease to bear interest so long as they are in the hands of the revenue collectors, or other public officers; but the interest re-commences when they are issued again to the public. The Bank of England often engages to receive them to a certain extent, and thereby promotes their circulation.

These bills are sometimes granted on the credit of the supplies for the present year; and in this way the produce of the annual taxes is generally anticipated. Sometimes they are charged on the supplies of the following year, and a large sum is generally authorized to be raised on them in time of war, to answer exigencies, by an act, proceeding upon what is called a vote of credit, passed near the conclusion of each session of Parliament. New exchequer bills are frequently issued in discharge of former ones; and they are often converted into funded debt, by granting capital in some of the stocks, on certain terms, to such holders as are willing to accept them.—The operations of this kind since 1791, have been already detailed.

The

The Bank of England advanced, in 1800, in consideration of the renewal of their charter for thirty-three years, 3 millions upon exchequer bills without interest for six years, and afterwards at 3 per cent. They also advanced 3 millions more, without interest, till six months after the conclusion of a definitive treaty of peace, in consideration of the deposits of public money, the average of which exceeds 10 millions.

II. Navy Bills. These are issued from the navy office, to answer any purpose in that important branch of national expenditure; and they bear interest after a certain date, if not discharged. A practice had long prevailed, when the number of seamen for the service of the year was voted, to grant a sum estimated at the rate of L.4 per month for each man, allowing 13 months to the year, for the whole naval expense; wages, victualling, wear of shipping, and ordnance, included. In consequence of the deterioration of the value of money, this allowance became insufficient; and navy bills to a large amount, were issued to supply the deficiency; and these were often funded afterwards in the same manner as exchequer bills. Since 1797, this practice has been discontinued; and sums, considered as adequate in the present circumstances, voted at once for the service of the navy; since which, the amount of the navy bills has not been so great as for-

formerly; and they have been paid from the money granted for the navy, without recurring to the system of funding.

III. Ordnance Bills, or Debentures, are issued in like manner from the Ordnance office, for supplying the exigencies in that branch of expenditure.

Table VII. exhibits the amount of exchequer bills, navy bills, and ordnance bills, and the whole amount of unfunded debt, in these three branches, on the 5th January of each year, from 1793 to 1812; also the increase or decrease during the preceding year. The fluctuation of the unfunded debt explains in part the cause of the great inequality of the addition to the funded debt, and must be taken into consideration along with the increase of the funded debt, after reducing both to the same rate of interest, in order to form a judgment of the whole increase of the public debt in any year*.

Besides the three principal branches of the unfunded debt, there are always a number of demands on the public, for bills accepted by the treasury; army charges, and miscellaneous services of various kinds. These are daily fluctuating, and their amount at any particular time cannot be easily ascertained.

The amount of these debts on the 5th January 1811,

* See Note XIX.

1811, as far as the accounts could be made up, was, - - - - - - - £3,648,368
Which added to the three great branches, - - - - - 46,971,579

Amount of unfunded debt reported to Parliament, - - - £50,619,947

Their amount, 5th January 1812, L.3,583,893
Three great branches, - - 50,454,166

Amount reported to Parliament, L.54,038,059
Increase of unfunded debt in 1811, 3,418,112

To these sums a large addition may be made, for demands due by the public, not brought to account.

The outstanding taxes, due to the public, may be placed against the unfunded debt. The only article of this sort deserving notice, is the property tax, on which there is a large arrear. It has amounted for some years past to about eight millions; but measures are now adopted for its readier collection.

The imprest moneys, or sums in the hands of the treasurers of the army and navy, and other public accountants, and which, so far as not expended, are refunded to the public at clearance, may also be stated against the unfunded debt. The amount of these cannot be ascertained.

PART III.

EXAMINATION OF PLANS FOR THE REDEMPTION OF THE NATIONAL DEBT, AND OTHER FINANCIAL OPERATIONS.

SECTION I.

Examination of Dr. Price's Views of Finance.

Dr. Price's views of the national debt were first announced in his treatise on Reversionary Annuities, in the year 1771; and more fully unfolded in an appeal to the public on that subject, published the following year; and in some subsequent publications.

His plan for the redemption of the national debt, is, the application of a certain sum of money annually, set apart from the rest of our annual revenue, and appropriated for the purchase of stock at the current prices; the interest of the part of the debt thus redeemed being always added to the original sum to increase the operation of the fund. This system to be inviolably fol-

lowed in time of war as well as in time of peace; and money, when wanted, to be raised by new loans, as if no such fund existed. To secure the steady execution of this plan, the management of the fund to be committed to special commissioners; acting under penalties in such a manner as would take it out of the hands of the treasury, and form a check upon the House of Commons itself.

The efficacy of this plan depends upon the operation of compound interest, which he considers as omnipotent. Money, he says, bearing compound interest, increases at first slowly; but the rate being continually accelerated, it becomes in some time so rapid as to mock all the powers of imagination.

He proceeds to illustrate and enforce his plan in the following manner:

There are three ways in which a nation may apply a sinking fund:

1st, The interests disengaged by it from time to time may be applied in payment of the public debt.

2d, They may be applied to current services.

3d, They may be immediately annihilated by abolishing the taxes charged with them.

In the first way of employing a sinking fund, it always increases, and that with a force which is continually accelerated; and which therefore, how-

however small at first, becomes equal to any effect. In the second way, it admits of no increase; because it always acts with the same force. In the first way it resembles a grain of corn sown, and the produce sown again, and so on; which will soon afford an increase sufficient to support a kingdom. In the second way, it resembles a seed, the produce of which is consumed. What has been said of the second way, is true in a higher degree of the third. A fund of the first sort is money bearing compound interest. A fund of the second sort, is money bearing simple interest; and a fund of the third sort is money bearing no interest at all.

In illustration of this, the Doctor supposes an annual sum of L.200,000, set aside as a fund for keeping the debt, *which the nation is contin ually incurring*, in a state of redemption. If applied the first way, a debt of L.200,000 is discharged the first year, which, supposing interest at five per cent. disengages an annuity of L.10,000. If this annuity, instead of being spent on services, is added to the fund, and both employed in paying debts, an annuity of L.10,500 will be disengaged the second year, or L.20,500 in both years. Computing in this manner, the amount of annuities disengaged increases faster each succeeding year, and in eighty-six years, becomes L.13,083,000, which being added to the original sinking fund, amounts to L.13,283,000. The full

value, therefore, of an annuity of L.13,083,000, will have been paid off in eighty-six years, that is, nearly 262 millions of debt, and consequently, though the state had been adding three millions to its debt every year, or 258 millions altogether, it would have been more than discharged, and that at no greater expense than the annual saving of L.200,000.

In the second way, the sum of annuity disengaged by it would have been eighty-six times L.10,000, or L.860,000, and the discharged debt would have been L.17,200,000; but besides this, there would be a debt saved, in consequence of applying every year the disengaged annuities to current services; for which, otherwise, equivalent sums must have been borrowed. L.10,000 will be saved at the beginning of the second year; L.20,000 at the beginning of the third year; and L.850,000 at the beginning of the eighty-sixth year; and altogether, L.36,550,000, which, added to the L.17,200,000 of debt discharged, makes the advantage to the public from this plan in eighty-six years, L.53,500,000; and as it was 262 millions by the first one, the difference to the public in its favour, is L.208,250,000.

In the third way, the whole advantage derived from it, is the discharge of a debt of L.200,000 annually, or L.17,200,000 in all.

Such is the substance of Dr. Price's views. He goes on to illustrate them by other suppositions.

tions, which, as his method of arguing is the same, it is unnecessary to recapitulate. His work is written in a very intemperate style, and contains, among others, the following assertions:

1st, That no benefit is derived from applying a fund in the second of the abovementioned ways, rather than the first. In both cases, the taxes are continued during the operation of the fund, and the national burthens are the same. The difference in favour of the former, already stated, is gained *without any kind of loss or expense*. By following the latter, we subject the nation to a loss of 208 millions, from a circumstance absolutely frivolous,

2d, War would increase the efficacy of the sinking fund; and any suspension of it then would be the *madness of giving it a mortal blow*, at the very time it was making the quickest progress.

3d, A state may, without difficulty, redeem its debts by borrowing money at an equal, or even a higher interest than the funds bear, and without providing any other funds than such small ones as are necessary to pay the interest of the sums borrowed. In private life, such a measure would be justly deemed absurd. But, in a state, it would be the effect of the soundest policy. It is borrowing money at simple interest, in order to improve it at compound interest.

4th, The sinking fund proposed, would render it of little or no consequence what interest a nation

tion paid for its loans. Reduction of interest has not been attended with the advantages commonly imagined, and, as hitherto managed, has only been an expedient to postpone public bankruptcy, by lessening the possibility of avoiding it.

The arguments already adduced in support of our twelfth general proposition, are perhaps sufficient to point out the judgment which ought to be formed of this plan, and of these assertions. For several reasons, however, it demands a more particular discussion.

1st, The excellent character and high reputation of the author. A pious divine,—a respectable scholar,—an expert calculator,—a virtuous man,—and an upright patriot*.

2d, The effects which it has produced upon our system of national finance. It has not shared the common fate of the projects of private individuals, and vanished in neglect and oblivion. It is the basis of Mr. Pitt's sinking fund, adopted fifteen years after its first publication, and now followed out for twenty-six years with a steadiness seldom experienced in public measures for so great a length of time, and under a succession of different administrations.

It

* We respect highly the integrity of the man, and believe that in all his writings, he was actuated by the purest motives for the public welfare; but we do not mean to insinuate any opinion in regard to his principles of civil liberty.

It will be proper before proceeding, to state distinctly the points in which all agree, and the points at issue.

It is universally admitted, that every productive additional taxation tends to prevent the progress of the national debt, if it be in a state of accumulation; and to accelerate its discharge, if it be in a state of redemption.

That every increase of expenditure, whether owing to necessity or profusion, tends to increase its accumulation, or retard its discharge.

That any sum of money, however small, improved by compound interest, will amount, in length of time to an indefinite magnitude; and therefore,

That any surplus of national revenue above national expenditure, will be sufficient, if it continue for a long time, and be faithfully applied, to discharge any national debt, however great.

The doctrine maintained by Dr. Price, is, that the formation and inviolable appropriation of a sinking fund, operating by compound interest, *in war as well as in peace*, is a measure of the utmost consequence, and that the effects of this system are greatly superior to those of any other application of a surplus, *the expenditure and taxation being equal*. That this is his opinion, appears from the passages above-quoted, and many others to the same purpose. His work means this, or it means nothing: for no man doubts that saving of expenditure,

penditure, or increase of taxation, have a powerful effect on the state of national finance.

In opposition to Dr. Price's doctrine, it is maintained, that the separation of a sinking fund from the general revenue, is a measure of no efficacy whatever: That the first and second methods of applying a surplus abovementioned, are merely different modes of official arrangement, leading to the same result: That in time of war, when the expenditure exceeds the revenue, the preservation of the sinking fund, and consequent increase of loans, is a system from which no advantage can arise: If it could be conducted without expense, it would be nugatory; as it is necessarily attended with expense, it is pernicious: That at the conclusion of a war, any surplus revenue applied for the discharge of debt during the subsequent peace, operates by compound interest, during the continuance of peace: But the notion of uniting that period to another period of peace, or to a still longer period of alternate war and peace, in order to obtain the powerful effect of compound interest acting for a great length of time, is illusory.

We return to the case supposed by Dr. Price, above mentioned, and compare the effects of the first and second methods of applying the surplus, either in time of peace or war.

In time of peace, when the second method is followed, £10,000, being the interest of the debt dis-

discharged the first year, is applied to the current services of the second year; L.20,000 the third year; and these sums are supposed requisite to compleat what the service of each year requires; and, as Dr. Price observes, they must have been borrowed if the first method had been followed. If loans be made for this purpose, either taxes must be imposed for the payment of the interest, or the sums borrowed accumulate by compound interest. In the former case, the nation is subjected to the burthen of taxes for payment of the interest of L.10,000 the first year; of L.20,000 more, or L.30,000 altogether, the second year; and of L.36,550,000 the eighty-sixth year; none of which would have been imposed according to the second method. It is this gradually increasing, and ultimately large additional taxation, that occasions the difference of L.208,250,000 stated by Dr. Price, as the loss arising from the second method. If the same taxes be imposed when the second method is followed, their produce is not wanted for the services of the year, and must accumulate at the end of the period to the above-mentioned sum in favour of the public.

If taxes be not imposed to pay the interest of these loans, then to the £20,000 borrowed the second year, there must be added a sum sufficient to pay the interest of the loan of the former year; and, in like manner, a sum must be borrowed each succeeding year, equal to the interest of all the

former loans, by which means the amount of these loans would accumulate by compound interest against the public.

The disengaged annuities under the second method, may be dissipated by profusion, and then there will be a difference between the methods equal to what Dr. Price states; but it is the profusion, and not the mode of application, that is the cause of that difference. They may be applied to the construction of canals, harbours, and other objects of national utility; and the benefits accruing from these to the public, may repay the expense of their execution, or otherwise; but the propriety of this mode of application of surplus revenue, does not belong to a financial inquiry.

In war, let us adopt Dr. Price's supposition of three millions being required annually in addition to the sums raised within the year, and of continuing the application of L.200,000 as a sinking fund; which sum is comprehended in the loan of three millions. The debt contracted in three years, is nine millions; and the additional taxes for payment of interest at five per cent. come to L.450,000. The national debt redeemed by a sinking fund of L.200,000, operating by compound interest in three years, is L.630,500, and therefore the additional unredeemed debt is L.8,369,500.

If no sinking fund be continued during the war, a loan of L.2,800,000 only will be required the

the first year, the interest of which is £140,000. But the taxes imposed that year amount to £150,000, (for we suppose the extent of taxation in both methods equal), therefore there is a surplus of £10,000, applicable to the service of the second year. The loan required for the second year will therefore be £2,790,000; the two loans together, £5,590,000; and the interest upon them £279,500. The additional taxes imposed the two first years amount to L.300,000, leaving a surplus of L.20,500 applicable to the service of the third year. The loan required the third, is therefore L.2,779,500, and the amount of the three loans L.8,369,500, exactly the same as the unredeemed debt when a sinking fund is continued; and it is obvious the same equality will hold for any number of years.

When Dr. Price says that a debt of 258 millions might be discharged in eighty-six years, at no greater expense than an annual saving of L.200,000, he overlooks the taxes imposed year after year, for the payment of interest; a great part of which would not have been needed, if that annual sum had not been separated from the public revenue. The reasoning used above is equally applicable to any other supposition of war expenditure, whatever be the annual deficiency, whether uniform or varying,—whether continued for three, or thirty, or an hundred years, still the taxation and expenditure of each year being the

same, the finances of the nation will be found in the same condition at the end of the period, whether the sinking fund be preserved inviolate, or entirely laid aside.

If no sinking fund be kept up for thirty years, a little alteration on the arrangement of public accounts would bring them exactly to the same state as if it had been uniformly adhered to; and conversely, the present form of our financial accounts arising from a sinking fund, may be brought by a like alteration of arrangement, to the form in which they would have stood, if no sinking fund had ever been thought of. It is impossible that a mere change of order in the public accounts, capable of being reversed at any time, can be attended with advantage to the public.

At the termination of a war, the nation remains charged with a certain debt, and it possesses, or ought to possess, a certain surplus revenue. The efficacy of this surplus to discharge the debt, depends upon its proportion to the debt, and the length of time during which it is applied to that purpose, and upon these alone. It operates by compound interest. But the manner in which the debt was contracted, or the surplus obtained, have no relation to the progress and period of discharge. It is of no avail that a sinking fund had been operating by compound interest during a former

former peace. When war breaks out again, the operation of compound interest is at an end. In place of continuing to discharge debt, an additional debt is contracted. When peace returns, the operation of discharge re-commences from a new basis, according to the state of finance at the time. The public debt is certainly increased;—the proportion of surplus revenue to that debt, and therefore the time requisite for its compleat discharge, may be greater or less than at the former peace; but the two periods of peace cannot be united to obtain a powerful effect from the long continuance of compound interest.

The Doctor's plan for discharging the national debt by borrowing money at simple interest, in order to improve it at compound interest, is, we apprehend, completely delusive. He admits the absurdity of such a measure in private life,—and its absurdity in national finance is exactly the same. The cases differ only in extent of sum, and duration of time, which no ways alter the general tendency of the measure. Suppose a million borrowed for this purpose, and assigned to commissioners for the redemption of the national debt, in whose hands it operates by compound interest. The interest of this loan is £50,000, which must either be provided for by some additional tax, or saved by some measure of public economy; or if neither of these be adopted, an additional loan must be made next year to

pay

pay the interest. In the former case, it is the tax or the economy, and not the operation described, that benefits the revenue; and they would have produced the same effect by affording an additional surplus improved at compound interest, without any loan. In the latter case, L.50,000 is borrowed the second year; and a sum equal to the interest of both loans, or L.52,500, the third year; and thus the debt accumulates by compound interest against the public, exactly to the same extent that the money vested in the hands of the commissioners, accumulates in its favour.

Dr. Price's assertion, that it is of little consequence what interest a nation paid for its loans, is untenable. In time of war, additional interest must be met by additional taxes, or accumulate by compound interest against the public. In time of peace, reduction of interest produces or increases a surplus, upon the application of which the redemption of national debt entirely depends.

The Doctor remarks, that a debt bearing a high rate of interest, with a sinking fund attached, is redeemed in less time than the same debt with the same sinking fund at a low rate of interest; and he considers this circumstance as a recompense for the burthen of the high interest. He overlooks that as a much larger sum is annually raised on the public when the interest is high, a great part of this additional burthen being paid to the national

national creditors, is entirely lost to the public; and a part only being added to the sinking fund as the redemption of the debt advances, accelerates the course of its discharge. A debt of ten millions, bearing interest at six per cent. is redeemed by a sinking fund of L.100,000, in about $33\frac{1}{2}$ years. If the rate of interest be only three per cent. it will require 47 years. But in the former case, the annual burthen on the public is L.700,000, and the whole burthen L.23,450,000; and in the latter case, the annual burthen is L.400,000, and the whole burthen L.18,800,000. If the sum of L.700,000 had been raised annually while the debt bore interest at three per cent. it would have been discharged in 19 years for L.13,300,000. Or if L.477,000 had been raised annually, it would have been discharged in $33\frac{1}{2}$ years, for £15,979,500.

Dr. Price supposes the case of a state burthened with debt, bearing five millions of interest, and able by its utmost exertions to raise a million more as a sinking fund. This, if the debts bear interest at six per cent. will pay off three-fifths of them in twenty-three years, and the state may be saved; but if the interest be no more than three per cent. it will not give the same relief in less than double that time, and a public bankruptcy may prove unavoidable*. He does not mention than

* Observations on Reversionary Annuities, 4th edit. v. I. i. p. 179.

that, in the former case, the debt supposed to exist, and to be discharged, is L.83,333,333, and in the latter case, L.166,666,666. The same national exigencies must have required the contraction of an equal debt. What he proves is only that a debt of half the amount, but bearing interest at a double rate, will be discharged in less time by the same sinking fund.

Dr. Price, in comparing the different ways of applying the disengaged annuities, says, that if they be not applied the first way, they might, for ought he knows, be best employed in the last way, that is, in the abolition of taxes; for a kingdom will then be sure of receiving some relief. We have endeavoured to evince that the first and second methods are the same in substance, and differ only in form. We esteem them greatly superior to the third. It is by continuing the taxes, and thus supporting the surplus during a period of peace, that any thing effectual can be done for discharging the national debt.

Dr. Price communicated to Mr. Pitt, in 1786, three plans for the redemption of the national debt *.

One of these, No. III. is the application of a million surplus, exactly the same as was adopted in the sinking fund established that year, which will be examined in the following section.

Another

* Morgan's Review of Dr. Price's writings on the Finances of Great Britain.

Another, No. II. proposed that the sinking fund should be raised from a million to £1,600,000, by additional taxes imposed at the following periods.

First year, - - - -	L.60,000
Second year, - - - -	180,000
Third year, - - - -	120,000
Fourth year, - - - -	120,000
Fifth year, - - - -	120,000
	L.600,000

This plan is more efficacious than the former, as the sum appropriated is greater; but of the same general tendency.

In the other plan, No. I. it is proposed to impose the same additional taxes, but apply their produce as follows: A part of the three per cent. stocks to be converted into four per cents, and the additional interest to be paid by these taxes. The holders of the three per cent. stock converted to advance an adequate sum for the increase of interest, and this sum to be applied in addition to the million for the redemption of the national debt.

We entirely agree with Dr. Price in the disadvantage of borrowing at a low rate of interest, with an increase of nominal capital; and the last mentioned plan, so far as it tends to counteract that system, appears beneficial.

The Doctor in a subsequent publication*, presuming that the sinking fund would strengthen the public credit, and raise the three per cents. considerably above par in intervals of peace, lays down a plan, founded upon that supposition, for reducing the national debt. Instead of a reduction of interest, which, he says, would retard the extinction of the public debt, he proposes a reduction of capital; and, supposing the three per cents. at 110, he assumes, that the public creditors would agree to have their capital reduced from L.100 to L.80, if secured of the present interest for fifteen years. At the end of that period, the reduced capital, bearing interest at $3\frac{3}{4}$ per cent. would sell much above par, and a similar operation might be repeated upon terms still more advantageous, and by this scheme, the operation of compound interest itself would be aided.

Admitting the price of stocks, and consent of the creditors, as supposed, this appears to us one of the best of the parts of the Doctor's plans. The methods he proposes to improve the surplus value of the stock for the public emolument, is, perhaps, the most effective that could be taken.

The advantages expected by Dr. Price and his friend, Mr. Morgan, from the execution of his plans, depend in a considerable degree upon the con-

* Preface to the third edition of Observations on Reversionary Annuities, p. 14, &c. This article is omitted in the following edition.

confidence which they suppose these measures would give in government security, and the rise of the price of stocks which that confidence would produce. All this is so hypothetical as to render a more minute examination of these plans, so far as they rest upon that expectation, unnecessary.

Much has been said by Dr. Price and others, of the advantage which a sinking fund produces in supporting the price of stock. We apprehend it is incapable of producing any such effect. The price of stock, like that of any commodity, depends on the proportion of supply and demand. Whatever sums are brought into the money market, and applied by the commissioners for the purchase of stock; equal sums are withdrawn from the money market, by the additional loans required to replace what is invested in the hands of the commissioners. Dr. Price justly observes*, that whatever effect a borrowing year has in sinking the funds, paying every year would have an equal contrary effect. He has not attended to the obvious consequence, that, if the payment be made by means of borrowing, it can produce no alteration in the price of the funds at all. He supposes ten millions borrowed every year to defray the expenses of a war, nine millions only of which

* Preface to third edition of Observations on Reversionary Annuities.

would have been wanted had not the surplus million been locked up; and further, that this scheme by keeping up public credit, and throwing money every year into the hands of the lenders, enables government to borrow at four instead of five per cent. and thereby save L.50,000 of interest. He overlooks that the effect of throwing a million into the hands of the lenders, is compensated by demanding from them an additional million in the loan.

The purchases made by the commissioners, no doubt support the funds at a higher rate than they would stand, if there were no such purchasers in the field, and the loan for the year the same, and this advance takes place at a time when a high price is disadvantageous to the public: But the additional loan which the sinking fund requires, must have as great an effect in depressing the funds, and that depression takes place at a time when a low price is disadvantageous to the public.

SECTION II.

Examination of Mr. Pitt's Sinking Funds.

The system of finance recommended by Dr. Price, is the same as that carried into execution under the administration of Mr. Pitt, and continued since. In the former section, we considered its merit and tendency on general principles. In this, we are to consider the effects it has actually produced.

The result of the foregoing reasoning is, that a sinking fund connected with an increasing debt, providing the loans be obtained on the same terms the debts were redeemed, and the additional operations conducted without expense, is attended with no consequence, good or evil. But in every loan, the contractors have a profit at the expense of the public; and when the system of a sinking fund is followed, the public, besides expense, sustains a loss equal to the *bonus* attending the additional loans.

It is of importance to ascertain whether the nation has sustained a loss of this kind, and to what extent. If the fact be ascertained, it corroborates the foregoing reasoning. If it be considerable, it leads us to enquire for what reason the system is persevered in.

The

The whole sum raised by loans from 1793, (when the first loan was made after the establishment of the sinking fund,) to 1st February 1812, is, - - - - - - - L.301,681,300
And by funding exchequer and navy bills, - - - - - 56,835,473

L.358,516,773

And there was expended in that period by the commissioners for the redemption of British debt, L.121,205,387.

During the whole of that period, the national debt annually increased; the sums borrowed by loans, or otherwise, exceeding the debt redeemed. Now, if no system for redeeming the national debt had been adopted, the amount of taxes and expenses remaining the same, the requisite amount of loans would have been less by the last mentioned sum made over to, and expended by, the commissioners.

Whether the mode of raising money by direct loans, or by funding exchequer bills, be most beneficial for the public, is a separate object of inquiry. The above sum of L.121,205,387 might have been either deducted altogether from the loans, or partly from the loans, and partly from the bills funded. We shall suppose it deducted from the loans, the operations by funding bills remaining as they have been.

The

The sum raised by loans, as above, was, - - - - - - - - - -	L.301,681,300
But of this there has been applied for discharging part of the loyalty loan, - - - - -	1,662,101
Remainder,	L.300,019,199

And the sums funded for these loans were,

In the 3 per cents. - -	L.411,282,211
In the 4 per cents. - -	30,164,000
In the 5 per cents. - -	22,639,152
	L.464,085,363
And long annuities, at a medium for 60 years, - - - -	L.428,065

Now these may be reduced to 3 per cents. by allowing a capital in proportion to the rate of interest, which is the natural value, and, although there be some fluctuation in the market price, comes near enough to the actual value.

Sum funded in 3 per cents. . -	L.411,282,211
Value of L.30,164,000 in 4 per cts.	40,218,666
22,639,152 in 5 per cts.	37,731,920
	489,232,797
Value of L.428,065 annuities for 60 years, at 18.9 years purchase, L.8,090,428, in 5 per cents. and in 3 per cents. -	13,484,046
Whole value of funded capital and annuities, reduced to 3 per cts.	L.502,716,843

Now

Now the capital redeemed by the commissioners R. N. D. for L.121,205,387, was,

181,600,080,	3 per cts. redeemed for,	114,491,454
7,796,400,	4 per cts. redeemed for,	6,586,934
142,000,	5 per cts. redeemed for,	126,998
L.189,538,480		L.121,205,387

And the capital redeemed, reduced to 3 per cent. is,

- - - - - - - -	L.181,600,080
L.7,796,400—4 per cents.	10,395,200
142,000—5 per cents.	236,666
	L.192,231,946

Now as L.300,019,199 (the sum raised by loans,) is to L.502,716,843, (the capital required to be funded in the 3 per cents. in order to raise that sum,) so is L.121,205,387 (the sum delivered to and expended by the commissioners, R. N. D. and which might have been deducted from the loans, if no such commission had existed,) to L.203,093,634, the sum which would have been saved from the funded capital, (3 per cents.) by lessening the loans.

Debts contracted by loans from 1793 to 1812, reduced to 3 per cents. -	L.502,716,843
Carried over,	L.502,716,843

If

Brought over,	L.502,716,843
If no sinking fund had existed, it would have been less by - -	203,093,634
And would have amounted only to	L.299,623,209
From above sum of L.502,716,843 Deduct debt redeem. 192,231,946	
Unredeemed debt, - -	310,484,897
Loss to the public by the sinking fund, - - - - - -	L.10,861,688

If we estimate upon the whole sum raised, including the funded bills as well as the loans, the effect of the sinking fund will appear still more disadvantageous to the public.

Sums raised by loans as above,	L.300,019,199
by funding bills,	56,835,473
	L.356,854,672
Capital funded for above, in 3 per cents.	L.434,175,310
L.36,107,321——in 4 per cents.	48,143,095
62,856,516——in 5 per cents.	104,760,860
	L.587,079,265
Value of L.435,861 annuities at 18.9. reduced to 3 per cents.	13,729,621
	L600,808,886

Then as before, 356,854,672 : 600,808,886 : : 121,205,387 : 204,064,229, the sum which would have been saved from the funded capital; from which, deducting the sum redeemed, there remains a loss of L.11,832,283 to the public.

But the present excess of national debt occasioned by the sinking fund is much higher. A portion of this loss has occurred each year for a period of nineteen years; and the whole effect ought to be estimated by accumulated computation of interest. If the last mentioned sum be equally divided, the annual loss is L.622,751, and this in nineteen years at compound interest, amounts to above 16 millions. Something, however, may be deducted from this statement, because the loss was not equally diffused through the period; the portions appertaining to the early part being considerably smaller.

Neither has any thing been charged for the expense of the commission for the redemption of the public debt. This branch of public expense, indeed, has been very moderate; but its amount with compound interest ought to be added to the other loss in order to ascertain the whole.

We are next to examine that part of Mr. Pitt's plan which attaches a sinking fund of one per cent. to the nominal capital of every loan, imposing taxes to that extent beyond what are required for

for the payment of the interest. This plan was also suggested by Dr. Price*.

There is an inequality in the extent of this fund from its being applied to the nominal capital. If the loan be made in the three per cents. it amounts to 1-60th of the sum borrowed. If it be made in the five per cents. to 1-100th.

Like the other parts of the plan, it occasions a loss to the public by borrowing upon higher terms, in order to redeem a part of the debt upon lower ones. It is equally destitute of all real efficacy for the discharge of debt, under equal circumstances of taxation and expenditure.

We next inquire into the ultimate effects of adherence to this system during a long period of continued warfare. Suppose the annual deficiency to be supplied by loan, is 11 millions: this funded in the three per cents. creates a capital of L.18,333,333, the interest of which is L.550,000, and the sinking fund, L.183,333.

It is obvious that if no more taxes be imposed than are required to pay the interest, the annual deficiency of 11 millions remains the same. A loan to that extent must be made annually, and taxes imposed for the payment of the interest, and our debt, interest, and taxes, increase annually, by equal sums, without the most distant prospect of relief.

But if taxes be imposed to a greater amount than the interest of the loan, the surplus fills up

* Appeal to the Public, p. 10, 11.

some part of the deficiency. On the foregoing supposition, L.183,333 is deducted from the 11 millions, leaving a deficiency of L.10,816,666; and if an equal amount of taxes be imposed the second and each succeeding year, the part of the deficiency supplied will increase by compound interest; and in a course of years, the whole 11 millions will be supplied, and no further loans or additional taxes will be needed, provided the expenditure remain the same as at the beginning of the period.

Now, as an annuity of L.1, at five per cent. compound interest, amounts to L.60 in about twenty-nine years, that length of time is required before the deficiency of 11 millions be supplied. During that time, L.733,333 of additional taxes are imposed annually, or L.21,266,666 altogether. The result is, that if the nation, which cannot at present raise 11 millions more to equalize its taxes to its expenditure, shall increase them gradually for twenty-nine years, till the addition amount to 21 millions, the point of equalization will be obtained, or, to use the language of the sinking fund, the debt annually redeemed, will then become equal to the debt contracted.

If the loan of 11 millions be made in a five per cent. fund, the sinking fund is L.110,000, which, added to the interest, gives an annual charge of L.660,000. Upon this supposition, thirty-seven years are required before the deficiency is supplied;

plied; and the additional taxes imposed, amount to L.24,420,000.

A sinking fund of this kind is preferable in ultimate efficacy to one founded on the appropriation and accumulation of a fixed annual sum. It increases with the increase of the funded debt; and, in a long time, will be equal to the discharge of any debt, however great, provided the nation bear the taxes which it requires. An annual sum, esteemed large at first, is likely to become inadequate to the discharge of a debt which increases beyond expectation. A sinking fund of L.1,200,000 would require forty-seven years and a half to fill up a deficiency of 11 millions; and the additional taxes imposed, would amount to above 28 millions.

We have stated the case of continued warfare, as being more simple in calculation. In the case of alternate war and peace, the periods would be different, but the relative merits of the different systems the same.

But the chief point to be attended to, is, that none of these plans, nor any possible plan, has any intrinsic power to discharge, or aid the discharge of our national burthens. An opinion prevails that the minister who instituted the sinking fund has put a powerful machine in action, which, although its first operations were feeble, has now become of great efficacy, and that the efficacy will continue to increase without any further

ther exertion on our part, like the acceleration of falling bodies by the power of gravity, till it amount to an indefinite magnitude.

When a minister establishes a sinking fund connected with a system of borrowing, he acknowledges the inability of the nation to bear at present the expense which his system of administration requires; and his plan, whatever it be, does no more than inform the public, that if posterity be able and willing to raise such sums, by extended taxation, at certain periods which his plan points out, as will make up for our deficiencies, with interest, and furnish besides what is wanted for the exigencies and contests of their own time, the public debt which he contracts will then be discharged.

The minister would have reason to doubt whether posterity would submit to all this. Yet, the plan of our sinking funds established in 1786 and 1792, have been adhered to with great steadiness, and our taxes raised to an amount beyond precedent or expectation.

The sums annually raised since the commencement of the war, are as follows *:

Year ending 5th January.

1793	£17,656,418	1798	£20,654,650
1794	17,170,400	1799	30,202,915
1795	17,308,811	1800	35,229,968
1796	17,858,454	1801	33,896,464
1797	18,737,760	1802	35,415,096

1803

* See Note XX.

1803	L.37,240,213	1808	L.60,189,414
1804	38,858,373	1809	63,026,563
1805	46,578,564	1810	65,227,264
1806	51,339,045	1811	69,188,041
1807	54,982,035	1812	66,973,208

From this statement it appears that the amount of our taxes, which was nearly stationary for some years after the commencement of the war, has increased progressively, (with one or two slight exceptions,) since the year 1795; that the increase was most rapid some years after the re-commencement of the war, when heavy war taxes were imposed, and that the present amount of taxes is about four times what it was at the commencement.

The part raised under the name of war taxes, upon an average of the three last years, is about 22 millions, or nearly one-third of the whole.

The whole amount of taxes, upon the average of the same years, exceeds 67 millions; a sum more than sufficient to defray the expense of the war, enormous as it is; but not sufficient to provide at the same time for the interest of debt formerly contracted.

Our present national revenue would therefore have been sufficient to support, without limitation of time, the expense of the present war on the scale it is conducted, if the taxation during former wars, and the early period of the present one, had been equal to the expenditure.

The

The cause of this is, not that certain sinking funds were established twenty or thirty years ago, but that we now submit to a taxation of upwards of 67 millions, and to the privations occasioned thereby. The same amount of taxation would have produced the same effect, although none of these funds had ever been established.

Convinced that the sinking fund has contributed nothing to the discharge of the public debt, and that it has occasioned a large addition to our public burthens, we next inquire, whether any and what advantages have been derived from it.

The means, and the only means, of restraining the progress of national debt, are, saving of expenditure, and increase of revenue. Neither of these have a necessary connection with a sinking fund. But if they have an eventual connection; and if the nation, impressed with a conviction of the importance of a system established by a popular minister, has, in order to adhere to it, adopted measures, either of frugality in expenditure, or exertion in raising taxes, which it would not otherwise have done, the sinking fund ought not to be considered as inefficient; and its effects may be of great importance.

We are not of opinion that the sinking fund has contributed in any degree to frugality in expenditure. The time during which it has operated, has not been a time of national frugality. Ministers have had the full power of raising what loans

loans they pleased, to supply the means of any expenditure, however lavish; and it will not be said they have used this power with a sparing hand.

In regard to increase of taxes, we are of opinion that the sinking fund has had a real effect in calling forth exertions, which, although they might have been made as well and as effectually, would not have been made, unless to follow out the line which that system required. A loan is made, and the revenue considered as charged, not only with the interest, but a certain proportion of the principal, annually. Taxes are imposed to meet the one as well as the other. If the sinking fund had not been in view, it is likely taxes would have been imposed for the interest only.

If the sinking fund could be conducted without loss to the public, or even if it were attended with a moderate loss, it would not be wise to propose an alteration of a system which has gained the confidence of the public, and which points out a rule of taxation that has the advantage at least of being steady. If that rule be laid aside, our measures of taxation might become entirely loose.

But if the loss attending the sinking fund be great, (and the foregoing computation evinces that it has been so,) it seems proper to inquire whether a plan might be followed that would deliver us from this loss, and at the same time carry

on the necessary measure of increased taxation. The present proportion of one per cent. on the nominal capital might be continued; not perhaps as the most eligible, but as possessing the advantage of being established. If a loan of 20 millions be transacted in the three per cents, the sinking fund attached to it on the present system is L.333,333. Now taxes may be imposed to that extent, besides what are required for interest; and that sum, instead of being made over to commissioners, may be deducted from the loans. Thus the nation would save the loss it at present sustains, of borrowing on lower, and paying on higher terms; and the imposition of L.333,333 additional taxes, which is the only measure of real efficacy would be the same as before *.

* See Note XXI.

SECTION III.

Examination of Lord Henry Petty's Plan of Finance.

We have already given an account of Lord Henry Petty's plan of finance. It was proposed to Parliament and the public, in the year 1807, accompanied with an elaborate set of tables. Being very complex, it was not generally understood. As it promised to raise the necessary loans with little or no increase of taxes, it was favourably received, and probably would have been continued for some years, if the ministry who brought it forward had remained in office.

The scheme, as proposed, though sufficiently complex in itself, is blended with many circumstances extraneous to its general merit. Advantage is taken of the falling in of annuities at different periods, by the expiry of their term, and of the reduction of the rate of management, and of an expected surplus from the present sinking fund. The savings by annuities and management, must give the same relief to the national annual burthens, under any system of finance; and if it be a beneficial measure to call in the aid of the surplus of the present sinking fund, when it attains a certain magnitude, the advantage re-

sulting from it will be the same, with whatever other measures it be connected. The proper way to judge of the new scheme, is to lay these extraneous circumstances aside; to leave the old debt to combat with the sinking funds already provided for its redemption, aided by any other means which existing circumstances supply; and to consider the operation of the new scheme, in regard to the new debt, contracted during the time it is in force, compared with the effects of the continuance of the former system. This will render our view of the subject simpler; and if the new scheme will not bear the test of examination when applied in this manner, it will not bear it at all.

The first point which presents itself to our view, is, that as the sums proposed to be raised by new taxes, during the first years of the scheme, are much less than the interest of the debts contracted, and therefore money must be borrowed, not only to supply the excess of the war expenditure above the sum raised within the year, but also to pay the interest of a great part of the loan, and thus subject the nation to the heavy and increasing expense of compound interest.

The sums borrowed the first year, were,

On war taxes, - - - -	L.12,000,000
By supplementary loan, - -	200,000
Carried over,	L.12,200,000

But

Brought over,	L.12,200,000
But there was applied to the redemption of the war tax loan from the mortgaged taxes, -	600,000
Nett loan, deducting part redeemed,	L.11,600,000
The sum required to compleat the expenditure is, - - -	11,000,000
And the remainder applied to pay the interest of the war loan, is,	L600,000

The only additional taxes imposed, are L.10,000 for interest of the supplementary loan, and L.3,333 for a sinking fund on the same; and as the former of these is appropriated, the latter only is to be stated against the interest of L.11,400,000, added to the funded debt, exclusive of the supplementary loan, of which, only 11 millions were applied to the public service.

In the second year, the sums proposed to be borrowed, were,

On war taxes, - - - -	L.12,000,000
By supplementary loan, - -	1,400,000
	13,400,000
Of which applied to the redemption of war tax loans, by taxes mortgaged this and former year,	1,200,000
Nett loan, deducting part redeemed,	12,200,000

Carried over.

Sum

Brought over,	L.12,200,000
Sum required for expenditure,	11,000,000
Remainder applied to pay the interest of the war loans for two years, - - - - - -	L.1,200,000

Against which there is to be stated,

Sinking fund of supplementary loan of first year, with interest, - - -	3,500
Sinking fund of supplementary loan, second year, - - - - - -	23,333
Interest of war tax loan redeemed first year, - - - - - - -	30,000
	L.56,833

Leaving an additional interest, for which no taxes are laid on, of L.1,143,666.

If we trace the proposed operations of this scheme further, we will find that the same pernicious mode of borrowing, for payment of the interest as well as the principal, continues for a course of years, though at a rate gradually diminishing, because the interest on the loans annually raised on the credit of the war taxes, for which no new provision is made, becomes less, owing to the redemption of part of that debt; and the interest on the supplementary loans, for which, together with a sinking fund, provision is made, increases, together with these loans themselves.

In

In order to shew what the progress and effects of this system, if continued, would have been in a period of twenty years, unincumbered with extraneous matter, Table VIII. is inserted in the Appendix, divided into several parts.

Part I. relates to the loans on the war taxes, and contains, column 1st, the annual amount of these loans; 2d, The war taxes annually mortgaged; 3d, The sums of these mortgaged taxes applicable as a sinking fund, being half the amount of the preceding articles in the former column; 4th, The sums redeemed each year, composed by adding the interest of the debt formerly redeemed, to the sums in the former column; 5th, The whole sum redeemed since the commencement of the scheme, obtained by adding the former column; 6th, The interest on these sums, necessary for composing column 4th.

Part II. relates to the supplementary loan, and contains, column 7th, the annual amount of these loans; 8th, The interest of the same; 9th, The sinking fund provided for the same, being 1-60th of the sum borrowed, or 1-100th of the nominal sum supposed funded in the three per cents; 10th, The sums redeemed annually, composed by adding the interest of the supplementary debt formerly redeemed, to the sums in the former column; 11th, The whole supplementary debt redeemed; 12th, The interest on the same.

Part III. exhibits a general view of the effects of

of these loans combined. Column 13th contains the amount of the war taxes since the commencement of the scheme; 14th, The amount of the supplementary loans; 15th, The amount of war tax loans unredeemed, obtained from colums 13th and 5th; 16th, The amount of supplementary loans unredeemed, obtained from columns 14th and 11th; 17th, The whole additional debt unredeemed; 18th, The interest on this unredeemed debt; 19th, The sums raised by additional taxes, being the amount of the sums in columns 8th and 9th.

The debts contracted and redeemed, inserted in these columns, are according to their real value. If invested in a three per cent. fund, as was proposed, the nominal sum will be greater, (supposing the three per cents. at 60,) in the proportion of five to three.

By comparing these two last columns, it will appear how far the sums raised annually by taxes imposed since the commencement of the scheme, falls short of the interest on additional debt contracted, for which taxes ought to have been provided. At the commencement, the difference is very great; and although they come near to an equality towards the end of the period, yet, taking in the whole, the difference is great. The necessary effect of this deficiency of taxation, is to subject the public to the loss incurred by compound interest.

Part

Part IV. is added to assist us in forming a judgment of the effects of this system compared with others. It exhibits the amount of debt existing, and taxes paid each year, for twenty years: first, upon the supposition of no sinking fund being established, and taxes imposed annually for the payment of the interest of the loans only; secondly, upon the supposition of a sinking fund of 1-100th of the sum borrowed; thirdly, of a sinking fund of 1-60th of the same. The first of these was the old system; and, though not a good one, may be taken as a standard of comparison, whereby to judge of the merit of the others; the second, is the present system, when the loan is made in a five per cent. fund at par; and the third, when it is made in a three per cent. fund. Columns 17th and 19th, from Part III. which exhibit the existing debt, and amount of taxes, on Lord Henry Petty's system, may be considered as joined to this part of the table.

It appears from this table, that, at the end of fourteen years, the period at which the whole war taxes are mortgaged, the amount of unredeemed debt by Lord Henry Petty's system, is £202,784,803, and the amount of taxes paid during these fourteen years, is £28,413,333. When no sinking fund is established, the amount of existing debt at the same period is L.154,000,000, and the taxes paid, £57,750,000. The additional debt contracted by the former, is £48,784,803,

and the saving in taxes, £29,336,666. The excess of the additional debt above the saving in taxes, is £19,448,137. At the end of twenty years, the amount of unredeemed debt by Lord Henry Petty's system is £285,519,205, and the amount of taxes paid during these twenty years, is £92,893,333. The amount of debt on the old system is 220 millions, and of taxes, 115 millions. The additional debt contracted by the former, is L.65,519,205; and the saving in taxes, L.22,106,667; the excess of additional debt above the saving in taxes, L.43,412,538.

In the system where a sinking fund of 1-100th is established, the unredeemed debt at the end of fourteen years, is L.139,527,162, and the amount of taxes, L.69,300,000. The debt is less by L.14,472,838 than according to the old system, and to obtain this saving, there is paid in additional taxes, L.11,550,000. The debt saved exceeds the additional taxes by L.2,922,838. At the end of twenty years, the unredeemed debt is L.187,617,650; the taxes, L.138,600,000. The saving in debt is L.32,382,350; the additional taxes, L.23,600,000. The excess in the saving of debt above the additional taxes, L.8,782,350.

In the system where a sinking fund of 1-60th is established, the unredeemed debt at the end of fourteen years, is L.129,878,604, and the amount of taxes, L.77,000,000. The debt is less by L.24,121,396, than according to the old system, and the additional taxes amount to L.19,250,000,

and

and the debt saved exceeds the additional taxes by L.4.871,396. At the end of twenty years the unredeemed debt is L.166,029,417, and the amount of taxes, L.154,000,000. The saving in debt is L.53,970,583; the additional taxes L.39,000,000; and the debt saved exceeds the additional taxes by L.14,970,583.

Thus it appears that Lord Henry Petty's system is by far the worst, and in twenty years brings on an addition of funded debt, (five per cents.) besides what is applied to the public service, of - - - - - - - - L.65,519,205

By the old system, the debt contracted, is equal to the sums applied to the public service.

By the system of a sinking fund of 1-100th, the debt contracted is less than the sums applied to the public service, by - - - 32,382,350

By the system of a sinking fund of 1-60th, the debt contracted is less than the sums applied to the public service, by - - - 53,970,583

The general result might have been known without calculation. In Lord Henry Petty's system, taxes are only imposed for a part of the interest of the loan, and in the first years only for a small part; and the interests not provided for, must accumulate in the manner of compound

interest, to augment the capital debt. In the system where a sinking fund of 1-100th is established, a part of the loan is annually paid, and its interest of course cancelled; and as taxes were imposed for the full interest, the part thus saved, operates in depressing the capital debt: and this effect takes place in a higher degree when a sinking fund of 1-60th is established.

In comparing the merit of different systems, the only points necessary to be attended to, are the amount of the loans contracted,—the part of these loans redeemed,—the interest incurred,—and the sums raised by taxes. The arrangement of the loans under different branches, and the appropriation of particular funds for payment of their respective interests, are matters of official regulation; and the state of the public finance is neither the better nor the worse whether they be conducted one way or other. A complicated system may perplex and mislead, but it can never ameliorate.

It is frivolous to maintain that a part of the public debt is charged on the war taxes, and, being in a course of discharge, ought to be separated from the remainder, in forming an estimate of the whole. That part, as much as any other, is a burthen on the nation. It must be discharged, if ever it be so, by taxes levied in future on the nation; and until it be paid, its interest must be provided for by such taxes; otherwise compound

pound interest accumulates against the public. It is of no consequence whether these taxes be of the kind originally imposed under the name of war taxes, and afterwards rendered permanent, at least for a period, by such appropriation; or new taxes of a different kind, imposed when the war taxes are discontinued*.

As well might a land steward, when required by his employer to lay before him a state of his rents and debts, reply, that it was unnecessary to bring the whole into view at once; that he had allocated a part of the rents of such a manor for the gradual discharge of a certain bonded debt, and those of another manor for the discharge of another bond; that, if the remaining rents, after these defalcations, were insufficient to support his lordship's expenses, he could easily borrow what money might be wanted; and if a growing deficiency should be the result of these operations, it might perhaps be made up at some future time, when the present leases on the estate expired, and the rents might rise.

We have heard it maintained, that a system may be so constructed, that, although it does harm in the first years of its operation, the result, after a longer continuance, will be beneficial. From its effects after a few years, we may judge with certainty of its ultimate tendency. Suppose after a trial of ten years, it has rendered the state of

* See Note XXII.

of our national finance so many millions worse than it would have been under a different system, but after that period it takes a beneficial turn. Were this possible, it would be better to follow the measures of that other system for these ten years, and then commence, upon a better basis, the measures of the former. But the supposition of a change of tendency is absurd. If it do harm in the beginning, it will do more harm the longer it is persevered in.

We have stated the loss to the public by Lord Henry Petty's system in twenty years, at L.65,519,205, or, deducting the saving in taxes, at L.43,412,538. But it may be justly estimated at a sum considerably higher. The above is the sum which the public must pay to the national creditors, or remain under the burthen of, in addition to the sums raised by loan, and applied to the national service. It arises from the operation of compound interest against the public, and is incurred for the sake of postponing the payment of interest, which should commence when the debt is contracted, to a distant time. But besides this, another loss is incurred by the system of borrowing larger sums than are wanted, in order to maintain a sinking fund, the consequences of which were considered in the last section; and a further loss is incurred by borrowing in a three per cent. fund during war, when the price is low, to be repaid during peace when the price is high, the

the consequences of which will be farther considered in the next section. These two sources of loss indeed attach to other systems, where similar measures are followed, as well as to Lord Henry Petty's; but they take place in his system to a greater degree, because the measures from which they arise, are carried on to a greater extent.

The distinction of war tax loans and supplementary loans, is in itself entirely futile: But occasion is taken from it to ascertain the portions of debt for which the interest shall be levied in taxes, and the portions, for the interest of which no provision shall be made at present. The proportion of these, like the scheme from which they arise, is altogether arbitrary, and very irregular, —the taxes imposed in the early part of the system being much smaller than those imposed afterwards.

After a continuance of twenty years, the sum raised in taxes within the year, is L.13,613,333, being L.2,613,333 more than it would have been under the old system, though less by L.662,627 than it ought to be in order to cover the interest of the debt. This, and an additional capital of L.65,519,205, is incurred, for the sake of saving L.22,106,677 in taxes during these twenty years, chiefly in the early part of them. In the 16th and following years, the taxes raised within each year are greater than those required by the old system.

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SECTION IV.

Examination of the System of Funding by Increase of Capital.

In the early part of the funding system, the capital assigned to the public creditor never exceeded the sum advanced by him. We find only two slight deviations from this rule during the seven years war, and one in the American war, before 1781. But after that year, when the difficulty of raising loans increased, capitals were assigned to the creditors much higher than the sums advanced; and this practice has been continued since to a greater extent.

It has been maintained in the House of Commons, on the part of Ministry, and, if we mistake not, even admitted by the Opposition, that it was the duty of a financier to raise the loan at the least annual expense it could be procured for, without regard to the amount of the nominal capital. We apprehend that this opinion is indefensible, except upon the supposition that all views of discharging the national debt, or any part of it, are for ever laid aside; and that the measures founded on it are very pernicious. The nation ought to pay no more in discharge of debt than the sum borrowed, together with the interest during the time the

the debt subsists. By the system now followed, it pays besides, the excess of the capital assigned, above the sum borrowed, in case the redemption be at par. Or, if the price of the funds enable the commissioners to redeem the debt on lower terms, the nation pays, in addition to the sum borrowed, the difference between the price of stock at the times of borrowing and paying, which is always great.

The terms of the loans during the seven years war, and of the American war, and of the debt contracted since the commencement of the war in 1793, have been already given. The excess of the capital funded, above the money borrowed, is as follows:

	Sums raised.	Capital funded.
The amount of the loans since 1793, is,	300,019,199	464,085,363
Of bills funded in that time, - -	56,835,473	69,053,785
	356,854,672	533,139,148
Of which redeemed by commissioners,	121,205,387	189,538,480
Debt contracted since 1793, unredeemed	235,640,285	343,600,668
Loans during seven years war, - -	53,000,000	54,230,000
Loans during American war, - -	79,175,000	101,075,000
	367,924,285	498,905,668
		367,824,285
Excess of capital funded above the sums raised,		131,081,383

Thus it appears, that if the funded debt, contracted since the commencement of the seven years war, were paid off at par, the nation would pay above 130 millions more than it ever received, which is more than one-third of the debt con-

tracted. The far greater part of this excess has arisen since the war of 1793, and almost the whole of it since the year 1780.

The national creditors are not obliged to accept of payment under par, that is, a sum equal to their nominal capital. But as they cannot, like private creditors, demand payment, and as the price of those funds which bear a low rate of interest is generally under par, it has been in the power of the public, in former intervals of peace, to pay off part of the national debt considerably under par, with the voluntary consent of the creditors; and the same end is now obtained, in a more constant manner, by the purchases made by the commissioners.

Dr. Price was of opinion, at the time he wrote, that the three per cents, on the return of peace, would rise to par, or above it; and he considered that as a desirable event. Whether it would be so, we may hesitate to pronounce, when we attend to the variety of interests involved. It could not take place without a general reduction of the rate of interest; and this must be accompanied by a like reduction of the profits on trade and manufacture. It would obstruct the redemption of the national debt under par, and prevent its being accomplished unless at the loss above mentioned.

But we do not consider the rising of the three per cents. to par as a probable event; and had

Dr.

Dr. Price lived to see the magnitude which our debt has now attained, it is likely he would have been of the same opinion. From the establishment of the sinking fund to the commencement of the war, there was L.6,772,350 of the three per cents, redeemed for L.5,424,592, being at the rate of 80 1-10th nearly. It is therefore a probable supposition, that on the return of a steady peace, the three per cents. may rise to 80.

Now if we suppose the three per cents. redeemed at 80, and the four per cents. and five per cents. at par, the sum required for the redemption of the abovementioned debt would be,

£370,650,230 capital in three per cents. at 80, - - - -	L.296,520,184
£128,255,438 capital in four and five per cents. at par, - -	128,255,438
Sum required to redeem the funded capital, - - - -	424,775,622
Sum borrowed, - - - -	367,924,285
	L.56,851,337

Hence the loss incurred by the public on this favourable supposition, is about 57 millions, in discharging the whole capital, and a like proportion for any part of it that might be discharged during a period of peace.

This system was only in its infancy when Dr. Price wrote, and he censures it in the following terms:—"In 1759, the lenders of L.6,600,000

" were entitled to a capital of L.115 for every " L.100 subscribed, or L.7,590,000 in the stock " of the three per cent. annuities: The conse- " quence of which must be, that, in discharging " this debt, 15 per cent. or near a million, must " be paid, which was never received, and by " which nothing has been gained.—Were a per- " son in private life, to borrow L.100, on condi- " tion it should be reckoned L.200 borrowed, at " two and a half per cent. he would, by subject- " ing himself to the necessity, (if he ever dis- " charged the debt,) of paying *double* the sum he " received, gain somewhat of the air of borrow- " ing at two and a half per cent. though he real- " ly borrowed at five per cent. But would such " a person be thought in his senses? One can- " not indeed, without pain, consider how need- " lessly the capital of our debts has been, in se- " veral instances, increased.——Thus do spend- " thrifts go on, loading their estates with debt, " careless what difficulties they throw on the " discharge of the principal, leaving that to their " successors, and satisfied with any expedients " that will make things do their time*."

This censure, severe as it is, appears in a great measure deserved. We ought, however, to pay attention to any saving of interest, which is the inducement for contracting the public debt in the manner that has been followed.

The

* Preface to third edition of Observations on Reversionary Annuities,

The natural proportion of the price of capital in the three per cent. four per cent. and five per cent. funds, is the same as that of the respective rates of interest. Thus if the five per cents. be at par, the four per cents. should be at 80, and the three per cents. at 60; and this proportion, except some slight deviations from transient causes, would continue to hold when the prices rose, providing the debt was irredeemable. The only object, in that case, in which the national creditors are interested, is to draw an annuity for the money they advance; and it would be to them a matter of indifference what denomination be given to the fund from which the dividend were drawn. If the three per cents. rose to 75, the four per cents. should rise to 100, and the five per cents. to 125. But as all the funds are redeemable at par*, the actual price can never much exceed it. So soon as the five per cents. rise above par, the financier will offer payment, and by doing so, induce the creditors to submit to a reduction of interest. The holders of stock in a three per cent. or four per cent. fund, have thus a prospect of gain by the rise of value, in which the five per cent. stockholder does not participate; and, in like manner, when the three per cents. rise above 75, the holders have a further gain in which the four per cent. stockholders do not participate. In consequence of these expecta-

* See Note XXIII.

pectations, the price of four per cents, is higher compared with that of the five per cents; and the price of the three per cents. higher than that of either of the others, than the proportion of the rates of interest; and loans are transacted in the three per cents. on easier terms. The lender expects to gain by the rise of stock; and what he gains, the public loses, at re-payment on redemption.

It has been the most general practice to fund bills in the five per cents, and to transact loans in the three per cents, although there be several exceptions as to both. In some years, the loans have been transacted at a rate of interest considerably lower than that at which the bills were funded: But in the whole period since the commencement of the war in 1793, the difference is inconsiderable.

The whole money raised by loans from 1st February 1793, to 1st February 1812, is L.300,019,199; the capital funded for which, reduced to three per cents, including the value the long annuities granted, is L.502,716,843, being at the rate of L.167.46, funded for L.100 raised; the interest of which at three per cent. is L.5. 0s. 6d. per cent. The amount of bills funded in the same period, is L.56,835,473; and the sum funded for the same, reduced, and including as above, L.98,092,043, being at the rate of L.172.6. funded for L.100 raised; the interest of which at three per cent. is L.5. 3s. 6d.

Thus,

Thus, for a difference of about three shillings per cent. on the interest, the public incurs almost a certainty of paying L.133 for every L.100 borrowed, and a risk of paying L.166, when the debt comes to be discharged.

Another consideration brings this small difference in the interest almost to nothing. In the loans, the public pays the whole interest for the year that the loan is transacted, whereas, from the terms of the instalments, there should only be paid about half a year's interest. If the lender did not obtain this advantage, he would demand an additional capital equivalent to L.2. 10s. in the five per cents. and yielding an interest of 2s. 6d. Nothing similar to this occurs in the transactions of funding bills.

This simple view of the result is sufficient to reprobate the system of borrowing on an advance of capital, and a low nominal interest. The capital funded should never exceed the sum raised, and such a rate of interest should be allowed on this capital as the lender is willing to accept of. At the present price of the funds, money cannot be borrowed at five per cent.; and perhaps it might be thought improper to give, in direct terms, a higher rate of interest than can be legally taken in private transactions, though there is a necessity for doing so in an indirect manner. To avoid this, the highest rate of interest on the capital might be fixed at five per cent.; and in addition

to

to this, when necessary, a long annuity might be granted; and when the funds are higher, the rate of interest might be fixed at three or four per cent. together with a long annuity, if necessary; the amount of which should be determined by open competition, as is done at present.

It is impossible to go over this subject without being struck with the great variety of modes that have been had recourse to in raising money.—From 1793 to 1811 inclusive, there have been twenty-three loans, of which fourteen have been in the three per cents, and four of these have been aided by a long annuity. One has been funded in the four per cents, and two in the five per cents. Five have been funded partly in the three per cents, and partly in the four per cents; all of them accompanied by a long annuity: and one partly in the three per cents, and partly in the five per cents.

In the same period there have been nine operations of funding bills, of which five have been altogether in the five per cents.; two partly in the four per cents, and partly in the five per cents; and two, jointly in the three, four, and five per cents; and to one of these a long annuity is attached.

POSTSCRIPT TO PART II.

Additions to the Funded Debt in 1812.

L.	Exchequer bills funded, amount, - -	L.5,431,700
	Amount capital at L.108 in 5 per cent. cons.	5,866,236
	Interest at 5 per cent. - - - - -	293,312
	Management, supposed at L.300, - -	1,760
	Total charge,	295,072
M.	Loan in supplement of above, - - -	L.6,789,625
	Capital funded at L.108 in 5 per cent. cons.	7,332,793
	Interest at 5 per cent. - - - - -	366,639
	Management at L.300, - - - -	2,199
		L.368,838

N. Joint loan for Britain, Ireland, and the East India Company, funded at L.120 in 3 per cent. reduced, and L.56 in 3 per cent. cons.

	Britain.	Ireland.	E. In. Comp.	Total.
Sums raised, - -	15,650,000	4,350,000	2,500,000	22,500,000
Sums funded in 3 per cts.	27,514,000	7,056,000	4,400,000	39,000,000
Interest, - - -	826,320	229,680	132,000	1,188,000
Management at L.300,	8,263	2,296	1,320	11,880
	834,583	231,976	133,320	1,199,880

The amount money raised for Britain in 1812, including Exchequer Bills funded, is, - - -	L.27,871,325
The capital funded in 5 per cents. - -	13,199,031
in 3 per cents. - -	27,540,000
Amount funded, - - - - -	40,739,031
Interest, - - - - - -	1,486,271
Management, - - - - -	12,222
	1,498,493
Besides sinking fund of one per cent. -	407,390

The amount of funded debt redeemed from the commencement of the sinking fund, to 1st November 1812, is,

By sinking fund, - - - - -	L.204,527,609
By land tax redeemed, - - - -	24,274,632
Converted into life annuities, - - -	1,907,149
British debt redeemed, - - -	L.230,709,390
Irish debt redeemed, - - -	10,229,494
Imperial debt redeemed, - -	1,340,005
Portuguese debt redeemed, - -	147,567
	L.242,432,456
Amount funded debt of Britain, 1st February 1812, - - - - -	L.771,370,396
Added to funded debt, Session 1812, -	40,739,031
	L.812,109,427
Redeemed as above, - - - -	230,709,390
Remaining unredeemed, - - - -	L.581,400,037

NOTES.

NOTES.

NOTE I.—Page 27.

SINCE the imposition of war taxes in 1798, the permanent revenue has been divided into two great branches:

1st, The consolidated fund, consisting of all the branches existing in 1786, when Mr. Pitt's sinking fund was established, and many taxes which have been imposed since; and charged with the interest of the public debt, the sums payable to the commissioners for its redemption, the allowance to the civil list, and pensions and other grants by Parliament. The surplus, which is always considerable, is applied to the current services of the year.

2d, The war taxes, consisting of the property-tax, the convoy-tax, and some other articles; and charged with the interest, &c. of the loans of 1807 and 1811, the amount of which is transferred to the consolidated fund.

To these may be added,

3d, The duties granted annually. These were formerly the land and malt-tax: Since the land-tax was rendered perpetual, certain duties on sugar and tobacco, and on offices, pensions, and salaries, besides the malt-tax, have been granted annually.

NOTE II.—Page 45.

PARADOXICAL effects are ascribed to the increase of money by compound interest.

One penny put out at the Christian era, at five per cent. compound interest, would, before this time, have increased to a greater sum than could be contained in *five hundred millions of* [illegible], all of solid gold.

Mr. Ricard appointed by his will, that the sum of 500 livres should be divided into five portions. The first at the end of a hundred years, amounting to 13,100 livres, to be laid out in prizes for dissertations proving the lawfulness of putting out money to interest. The second, at the end of two centuries, amounting to 1,700,000 livres, to be employed in establishing a perpetual fund for prizes in literature and arts, and for virtuous actions. The third, at the end of three centuries, amounting to more than 220 millions of livres, to be employed for establishing patriotic banks, and founding museums with ample establishments. The fourth, at the end of four centuries, amounting to 90,000 millions, to be employed in building a hundred towns in France, containing each 150,000 inhabitants. The fifth, at the end of five centuries, amounting to four millions of millions of livres, to be appropriated for the payment of the national debt of Britain and France,—for producing an annual revenue to be divided among all the powers of Europe,—for buying up useless offices, purchasing a royal domain, increasing the income of the clergy, and abolishing fees for masses,—for maintaining all children born in France till they be three years of age,—for improving waste lands, and bestowing them on married peasants, —for purchasing manors, and exempting the vassals from all servitude,—for founding houses of education, workhouses, houses of health, and asylums for females,—for portioning young women,—for conferring honorary rewards on merit;—besides a large surplus to be appropriated at the discretion of his executors.

Dr. Franklin planned a similar will.

It is theoretically true that compound interest may accomplish all these things; but such extravagancies rather tend to throw ridicule on the subject, than increase our confidence in its operation.

Note III.—Page 60.

In early times, all interest for money, or *usury*, as it was then called, was unlawful. Yet, in defiance of heavy penalties, necessity enforced the payment of interest, often upon exorbitant terms. The first statute authorising and limiting the rate of interest in England, was in the reign of Henry VIII. in the year 1546, when it was fixed at ten per cent. In the reign of his successor, Edward VI. all interest was again prohibited. In the year 1572, in the reign of Elizabeth, interest was permitted at the rate of ten per cent. In 1624, in the reign of James I. the rate was reduced to eight per cent. In 1651, during the usurpation of Cromwell, it was reduced to six per cent.; and this was confirmed at the Restoration. In 1714, it was reduced to five per cent.; at which, as the legal rate, it has continued since.

All these reductions by law seem rather to have followed than anticipated the actual rate of interest, arising from the commercial state of the nation. To compell the lending of money at a lower rate of interest than that which naturally results from existing circumstances, is equally impracticable as to prohibit interest altogether. But when the actual rate of interest fell below the legal standard, that rate was reduced to prevent particular acts of oppression.

In Italy and other states where commerce was earlier established, interest was reduced sooner and lower than in England. In Scotland, the reduction took place a little later. Interest there was reduced to eight per cent. in the year 1633, being nine years later than in England: and it was reduced to six per cent. in 1661, ten years later than in England.

Note IV.—Page 64.

The business of stockjobbing is founded on the variation of the price of stock, which it probably tends, in some measure, to support. It consists in buying or selling stock, according to the views entertained by those who deal in it of the probability of the value rising or falling.

This business is partly conducted by persons who have property in the funds. But a practice also prevails among those who have no such property, of contracting for the sale of stock, on a future day, at a price now agreed on. For example, A. may agree to sell B. L.10,000 of three per cent. stock, to be transferred in twenty days, for L.6,000. A. has in fact no such stock; but, if the price on the day appointed for the transfer, be only 58, he may purchase as much as will enable him to fulfil his bargain for L.5,800, and thus gain L.200 by the transaction: On the other hand, if the price of that stock should rise to 62, he will lose L.200. The business is generally settled without any actual purchase of stock, or transfer, by A. paying to B. or receiving from him, the difference between the price of stock on the day of settlement, and the price agreed on.

This practice, which amounts to nothing else than a wager concerning the price of stock, is not sanctioned by law; yet it is carried on to a great extent: and as neither party can be compelled by law to implement these bargains, their sense of honour, and the disgrace attending a breach of contract, are the principles by which the business is supported. In the language of the Stock Exchange, the buyer is called a *Bull*, and the seller a *Bear*, and the person who refuses to pay his loss is called a *Lame Duck*; and the names of these defaulters is exhibited in the hall of the Stock Exchange, where they dare not appear afterwards.

Note V.—Page 67.

The branches of revenue formerly appropriated to the civil list, were the profits of the post-office; a few branches of the excise and customs; part of the duty on wine licenses; the remains of the ancient hereditary revenue; and a further sum of £120,000 charged on the aggregate fund. At the beginning of the present reign, these branches were added to the aggregate fund, and that fund was charged with an annual payment of L.800,000, as the full and permanent allowance for the civil list. This sum has been since augmented several times, and now amounts to L.958,000, besides allowances to the branches of the royal family;—an augmentation by no means adequate to the deterioration of the value of money during the period. And although considerable sums have been granted to supply the deficiencies of the civil list, the whole money appropriated to it during this reign, is inferior to the produce of the branches of revenue which formerly belonged to it.

Note VI.—Page 70.

In the account of the public debt presented to the House of Commons in 1799, it is said, that "it has been found impracticable to ascertain the amount of the sums raised at different periods, which created the capitals composing the several funds existing prior to 33 Geo. III. Anno 1793."

This avowal of ignorance, which may appear surprising where every means of official information were at command, may excuse a private inquirer for declining to carry back his researches to an earlier period. We have, however, given a statement of the loans during the seven years war, and the American war, which, if not altogether accurate, is a near approximation. We have not attempted a statement of the financial operations by funding bills during that period.

Note

Note VII.—Page 78.

The loan of L.18,000,000 in the year 1796, (commonly called the *Loyalty Loan*,) was contracted on the following terms: The subscribers of L.100, received a capital of L.112 10s. in a separate fund at five per cent.; and it was agreed that the holders, two years after the ratification of a definitive treaty of peace, should be entitled either to receive payment, or to have their stock converted into three per cents. at the rate of L.133. 6s. 8d. for L.100 capital. But this loan is not redeemable on the part of Government, till three years after the other five per cents. be paid. The subscription was filled up in a few hours, the sum funded being L.20,124,843.

This agreement came to be implemented in 1804. The consequent operations were continued for several years, and some portion of this loan has been paid every year since; but these are all introduced in the table in the year 1805.

In consequence of the renewal of the war, the price of the funds was so low, that the holders of the Loyalty would have been losers by accepting of L.133. 6s. 8d. in the three per cents. It was necessary, therefore, either to pay them, or offer them more advantageous terms.

By act 44 Geo. III. cap. 99, the holders of the loyalty loan were intitled to receive L.100 in the five per cent. consols; and so much additional in the three per cent. reduced, as would make up the value of L.100, at the current price.

By act 45 Geo. III. cap. 8. the holders of L.4,448,817 were to receive so much capital in the five per cent consols, or the three per cent. reduced, as would be equal in value to L.100; and so much additional capital in the three per cents. reduced, as would be equal to ten shillings more.

By act 45 Geo. III. cap. 73, the same terms were granted to other holders of the loyalty loan, to the extent of L.1,254,629.

The holders of the five per cent. annuities 1802, amount, L.2,227,612,

L.2,227,612, which was joined to the Loyalty Loan, were entitled to the same terms.

The effect of these operations was to make an addition to the three per cents, of - - - - - L.7,426,233
And to subtract from the five per cents. - - 3,945,210

Making an addition to the funded debt of - L.3,481,023

And there has been paid of the Loyalty Loan, - L.1,662,101

The particulars are as follows:

	Sums transferred from Loyalty Loan.		Capitals added to 3 per cts. & 5 per cts. cons.
1804	13,263,553	subscribed into 5 per cent. cons.	
		And an additional capital granted in 3 per cents. reduced, of - - -	2,716,815
1805	2,678,561	subscribed into the 3 per cent. reduced,	2,678,561
		And an additional capital of - -	1,[illegible]5,707
		Afterwards a further additional capital of	215,149
		Capital added to 3 per cents.	7,426,233
	2,019,661	subscribed into 5 per cent. cons. and an additional capital granted in the same of - - - - -	265,018
	1,005,290	borrowed in 5 per cent. cons. to pay off	
	18,967,067	Loyalty Loan.	
		And an additional capital of - -	130,436
		Sums added to 5 per cent. capital,	395,454

Sums transferred from Loyalty Loan to 3 per cents, as above, - - - - - - - L.2,678,561

Loyalty Loan paid off in			
	1806,	L.979,257	
	1807,	336,088	
	1808,	153,697	
	1809,	60,867	
	1810,	18,779	
	1811,	113,413	
			1,662,101
Sums deducted from 5 per cents. - -			4,340,664

Carried over.

	Brought forward,	L.4,340,664
Sums added to 5 per cents. as above,		395,454
Balance deducted from 5 per cents.		L.3,945,210

And the present state of the Loyalty Loan is as follows:

Amount Loyalty Loan, - - - -		L.20,124,843
Five per cents. 1802, - - -		2,227,612
		L.22,352,455
Sums transferred as above,	L.18,967,067	
Sums paid off as above, -	1,602,101	
		20,629,168
Remaining of Loyalty Loan, 1st Feb. 1812,		L.1,723,287

But these operations on the Loyalty Loan, there was added to the interest on the public debt,	L.25,527
And to the management, - - - -	1,710
	L.27,237

Note VIII.—Page 79.

In funding the navy bills, 1797, option was given to the holders to receive capital either in the three per cents, the four per cents, or the five per cents, at different rates according to the dates of the bills, as exhibited in the following table.

Bills dated before

	3 per cent.	4 per cent.	5 per cent.
1st January, 1796,	L. 178 11 5	L. 138 17 9¼	L. 119 0 11¼
30th April,	176 19 9¾	137 18 7¾	118 6 10¾
31st July,	175 8 9	136 19 8½	117 12 11¾
27th October,	173 18 3	136 1 1	116 19 2

If all the navy bills then funded, had been at the second of these rates, (which were the rates allowed for the Exchequer bills

Bills funded at the same time,) the amount would have stood as follows:

L.9,293,483	in 3 per cents, at	L.176	19	9¾	L.16,438,175
544,982	in 4 per cents, at	137	18	7¾	765,428
1,728,617	in 5 per cents, at	118	6	10¾	2,034,890
L.11,567,082					L.19,238,493

But the amount of navy bills actually funded, was L.11,595,529; therefore the average rates must have been lower than those of the second class.

Note IX.—Page 82.

A method was had recourse to in adjusting the terms of the loan 1802, which indicated considerable pressure on our resources: L.125 was granted in the three per cents; and as part of the annuities for terms of years expired in 1808, an additional capital was granted to compleat the necessary emolument, the interest of which was deferred till these annuities should expire. Thus the relief in view by the falling in of these annuities, was disappointed to a certain extent. The bidding for the loan was on this deferred stock, and it was taken at L.6. 19s. 3d.

Note X.—Page 84.

The loan of 1807 was raised on Lord Henry Petty's plan, an account of which is given, page 101, &c. L.12,000,000 was charged on the war taxes, and L.1,200,000 of these taxes mortgaged for interest and redemption The remaining L.200,000 was raised as a supplementary loan in the common manner, with a sinking fund of one per cent. A separate accompt is kept of this loan: But this plan, though intended to be perpetual, was never used aftewards.

Note XI.—Page 86.

The loan of 1809 was raised at L.60 in the three per cent. reduced, L.60 in the four per cent. cons. and a long annuity of 8s. 10d. L.600,000 of this loan was for Portugal; and instead of distributing that sum among the different funds charged with the general loan, L.895,522 was set aside in the three per cent. reduced, as an equivalent, and a sinking fund of L.30,000, provided for its redemption.

Note XII.—Page 86.

An option was given this year to the holders of the Exchequer Bills proposed to be funded, that they might receive either L.103. 5s. in the five per cents. cons. or L.81. 8s. in the five per cents, and L26. 5s. in the four per cents. A similar option was given next year.

Note XIII.—Page 90.

Annuities for lives have been granted at various times, to the amount of L.151,437, exclusive of those which were converted, or entirely fallen in before 1786; generally on single lives; sometimes on two or three lives; and sometimes with the benefit of survivorship. They were reduced by death in 1786, to L.94,878; at which time the present sinking fund was established, and the sums saved by their farther reduction, appointed to be carried to that fund. They were reduced in 1798 to L.79,185; in 1802, to L.73,706; and in 1812, to L.65,571; and as a considerable part of this last sum has not been demanded for these three years, the reduction by death is probably greater. The particulars of the original amount of these annuities, their state at the commencement of the sinking fund, and their present state, are exhibited in the following table.

ACTS.	Original amount.	Expired before 1786.	Remaining 1786.	Expired from 1786 to 1812.	Remaining 1812.
5 Will. and Mary,	22,633	14,438	8,195	8,195	
18 Geo. II. - -	22,500	10,182	12,318	4,034	8,284
19 Ditto, - - -	45,000	22,533	22,467	7,517	14,949
30 Ditto, - - -	33,750	9,183	24,567	8,406	16,161
6 Geo. III. tontine,	540	- -	540	- -	540
18 Ditto, - - -	2,849	80	2,769	232	2,538
19 Ditto, - - -	5,318	143	5,175	923	4,252
29 Ditto, tontine,	18,442	- -	18,442	- -	18,442
	151,032		94,473		65,166
Addition to tontine,	405	- -	405	- -	405
	151,437	56,559	94,878	29,307	65,571

Amount of annuities granted for years or lives,		L.1,729,731
Addition to Tontine of 1789, - - -		405
		L.1,730,137
Deduct annuities fallen in by expiry of term in 1805, 6, 7, and 8. - - -	L.494,656	
By death of annuitants from 1786 to 1812, - - - - -	29,307	
		523,963
		L.1,206,174
Add life annuities for capital converted, -		112,247
		1,318,421
Amount of annuities existing 1st February 1810, viz. Long annuities which expire in 1860, - - - - - - -	L.1,140,601	
Life annuities as above, -	65,571	
Life annuities for capital converted, - - -	112,247	
		L.1,318,421

NOTE

Note XIV.—Page 90.

An account of the allowances for the management of the national debt, is given, page 94. It has been diminished by the reduction of the rate,—by the falling in of annuities,—the redemption of the capital by the sinking fund,—and the transference for land tax. It was thought unnecessary to introduce the portions of abatement in the statement of each year's charge, and the whole is deducted at the end of Table II.

The savings in management by the reduction of the rate, and annuities fallen in, is - - - - - -	L.55,303
For capital redeemed by the sinking fund, - -	61,709
For capital transferred for purchase of land tax, -	8,139
	L.125,151

Note XV.—Page 99.

The interest, &c. of all the debt, whether existing at the establishment of the consolidated fund, or contracted since, as well as the civil list, and other parliamentary grants, are charged on the consolidated fund; and it is credited with all the taxes in force at its commencement, or imposed since, applicable to these purposes. But the articles on both sides preceding 1803, are now charged promiscuously; and the charges on the loans since 1803, are placed against the branches of revenue appropriated to each.

The interest, &c. of the loan 1803, is charged on L.250,000 reserved out of the consolidated customs; L.59,965 from the consolidated stamp duties; and a variable sum from the assessed taxes.

The interest, &c of the loan 1804, is charged on the consolidated stamp duties, which were augmented by a duty on the transfer of property according to its value.

The

The interest, &c. of the loans 1805, is charged on consolidated stamp duties and customs, to which certain additions were made; on additional postage; additional duty on horses; and additional excise on salt, auctions, bricks, coffee, cyder, glass, vinegar, and wine.

The interest, &c. of the loan 1806, is charged on additional duties on wine and spirits; an addition of ten per cent. on assessed taxes; and a small charge on the stamp duties.

The interest, &c. of the loan 1807, is charged on the war taxes, agreeably to Lord Henry Petty's system.

The interest, &c. of the loans 1808, is charged on additional assessed taxes and stamp duties. The short annuities now fallen in, and savings by the reduction of the rate of management, were brought in aid of this year's charge.

The interest, &c. of the loans 1809, was charged on the war taxes, except an allowance of L.105,000 from the consolidated customs.

The interest, &c. of the loans 1810, was charged on the surplus of stamp duties produced by their increase and consolidation.

The interest, &c. of the exchequer bills funded in 1811, was charged on additional duties on spirits; and that of the loan on the war taxes: to replace which, additional duties were imposed on timber, ashes, and foreign linen, and added to the war taxes.

The interest, &c. of the debt contracted 1812, is charged on additional assessed taxes; additional duties on glass, hides, tobacco and snuff; and additional postage.

Note XVI.—Page 100.

The term of forty-four years was mentioned when the one per cent. sinking fund was announced, as that in which each loan would be repaid. The actual term depends upon the rate of interest, and the comparative prices of stock when the debt is contracted, and during the period of its redemption.

Sup

Supposing these equal, and the sinking fund 1-100th of the sum borrowed, the periods required for redemption, are,

At 3 per cent. interest,	-	47 years.
At 3½ per cent.	-	44 years.
At 4 per cent.	-	41 years.
At 5 per cent.	-	37 years.

But if the loan be funded in the three per cents, at 60, and therefore the sinking fund 1-60th of the sum borrowed, the periods required for redemption, are,

At 3 per cent.	-	35 years.
At 3½ per cent.	-	33 years.
At 4 per cent.	-	31 years.
At 5 per cent.	-	29 years.

Note XVII.—Page 109.

The inequality of the debt contracted in different years is remarkable. The expense was much greater in some years than others; but the inequality is partly to be accounted for from the loans having sometimes been made near the end of the year, and applied to the service of the following year; and also, from the increase or diminution of the unfunded debt. The debt contracted annually since the renewal of the war in 1803, has been less than in the former war, owing to the large sums raised by land taxes and otherwise, within the year. It is remarkable that the debt redeemed in 1808, before reduction to three per cent. is greater than the debt contracted.

Note XVIII.—Page 110.

The Author of this Inquiry has not been able to procure an account in which the capitals redeemed in the three per cents, four per cents, and five per cents, are distinguished for each year: But it appears from the papers in his possession, that

that the redemption before 1791, was made altogether in the three per cents.

That in 1791 and 1792 there was redeemed in the 4 per cents.

- - - - - - -	L.126,750
From 1793 to 1798 inclusive, in the 4 per cents.	380,250
From 1799 to 1809 inclusive, in the 4 per cents.	6,122,700
In 1810, in the 4 per cents. - -	1,166,700
Total redeemed in the 4 per cents.	L.7,796,400
From 1799 to 1809 in the 5 per cents. -	L.142,000

And the redemption in 1810 and 1811 was altogether in the 3 per cents.

The whole capital redeemed each year being known, the reduced column of redeemed capital is composed by distributing the amount redeemed in the four per cents, and five per cents, equally through each year of the periods abovementioned, and assigning the remainder of each year's redemption to the three per cents. No error can arise from this assumption that affects the general view of the subject exhibited.

Note XIX.—Page 119.

For example, the increase of funded debt in 1811, was,

In 3 per cents.	- - -	L.14,400,000
In 4 per cents.	L.2,400,000, -	3,200,000
In 5 per cents.	12,444,711, -	20,741,185
		L.38,341,185
Increase of unfunded debt,	L.3,418,112, -	5,696,853
		L.44,038,038
Redeemed by sinking fund in 3 per cents.	-	17,983,457
Addition to public debt, estimated in 3 per cents.		L.26,054,581
And estimated in 5 per cents.	- -	15,032,748

Note XX.—Pages 150, 151.

These sums (except the last,) are taken from the return to an order of the House of Commons, dated 19th February 1811. They do not comprehend the charges of collection, amounting now to above three millions, nor the money repaid on drawbacks, bounties, and like allowances. They comprehend the rents of crown lands, and some other parts of hereditary revenue, which do not form any part of taxation. They comprehend the balance in the hands of the collectors and receiver-general, and the bills in the hands of the receiver-general at the commencement of each year; and as the balances and bills outstanding at the end of the year, are not deducted, the sums contained in the table are larger than the amount of the taxes by the amount of these balances, which on the 5th January 1811, were, L.1,877,518; and on the 5th January 1812, L.2,031,826.

Notwithstanding these inaccuracies, the above table exhibits a competent view of the progress of our taxation.

Note XXI.—Page 154.

The high encomiums bestowed upon Mr. Pitt's sinking funds, rendered it necessary to enter into a full discussion of their merits.

" To the consolidated fund the country has looked for the " interest of its debt, and for its extinction, to the sinking fund. " The best eulogium that could be made on the sinking fund, " was the plain statement he had made. *There could be but one* " *opinion in the House on the subject. It was owing to the institu-* " *tion of the sinking fund that the country was not charged with a* " *much larger amount of debt.* IT WAS AN ADVANTAGE GAINED BY " NOTHING, and a system likely to be attended with still greater " advantages. Therefore, independent of considerations of good " faith, which should induce the House to hold and cling to a

" system

" system once adopted, it was pledged to support it, having po-
" sitive trial and experience of its utility."—*(From Lord Henry Petty's Speech at opening the Budget, 29th March, 1806, as reported in the Newspapers at the time.)*

" On the same principle which guided the determination of
" Parliament in 1786, another act was passed in 1792, which
" provided that on all future loans, a surplus of one per cent.
" per annum on the capital should be raised for the redemption
" of the capital. *This was an idea conceived in the spirit of inflex-*
" *ible integrity and economy,* of which nations rarely afford an
" example, though, like the same virtues in private life, it is
" calculated to promote in the highest degree their prosperity."
—*(Examination into the Increase of the Revenue from* 1792 to 1799, *by George Rose, Esq.)*

Quotations of a like kind might be adduced to a large extent.

Note XXII.—Page 165.

In Mr. Rose's Examination into the Increase of the Revenue, &c. 1799, a table is given of the money borrowed, and capital debt contracted since the commencement of the war, in which the loan of 1798 is stated at nine millions, with a corresponding capital, and the columns summed accordingly. He adds, indeed, in a note, that " the loan of 1798 was for 17 millions;
" but the charge on the consolidated fund was only for nine
" millions, as the remaining eight millions is to be supplied
" from the aid and contribution tax, in purchasing stock to the
" extent of the capital created by that sum."

Did he believe, or did he expect his readers to believe, that this part of the loan, which he endeavours to keep out of view, was less a burthen on the public, because it was then proposed to discharge it by a certain tax *to be levied* on the public;—an arrangement which was soon after relinquished?

Note XXIII.—Page 173.

In order to support the value of the five per cent. stock, it was enacted that it should not be redeemable till 25 millions of the three per cents. were paid off with money applicable to the redemption of the public debt. This restriction is now removed by the condition being fulfilled. The loyalty loan is not redeemable at par till the expiration of three years after the consolidated five per cents. are paid off.

APPENDIX,

CONTAINING THE FOLLOWING TABLES.

I. Amount of the national funded debt at the Revolution, and at the commencement and termination of every war since.

II. Progress of the funded debt of Britain, from 1786 to 1812, with the annual charge on the same.

III. Progress, and redemption of funded debt, and balances unredeemed, according to the nominal capital, and also when reduced to three per cents.

IV. Loans for Ireland, guaranteed by Britain, with the annual charges, and redemption.

V. Progress of the whole Irish funded debt, payable in Dublin and London, with the annual charges.

VI. Sinking fund of one per cent. on loans.

VII. Exchequer bills, navy bills, and ordnance bills.

VIII. Lord Henry Petty's Plan of Finance.

Part I. Loans on war taxes.
II. Supplementary loans.
III. Joint view of both loans.
IV. Comparison with other systems.

N. B. In the following tables, the figure marked in the unit place of the sum of a column is often different from what it will be found on trial, owing to omission of the shillings and pence. The same thing sometimes occurs in the foregoing statements.

TABLE

TABLE I.

Amount of the National Funded Debt at the Revolution, and at the commencement and termination of each war since.

National debt at the Revolution, -	1689	L.1,054,925
Funded debt at the peace of Ryswick,	1697	21,515,772
— at the commencement of the war,	1701	16,394,701
— at the peace of Utrecht, -	1714	55,282,978
including annuities afterwards subscribed to the South Sea stock.		
— at the commencement of the war,	1740	47,954,623
— at the peace of Aix-la-Chapelle,	1748	79,193,313
— at the commencement of the war,	1756	73,289,673
— at the peace of Paris,	1763	133,959,270
including L 9,839,957, which was funded in the subsequent years.		
Besides this, there was about L.6,000,000 of debt paid off without being funded.		
— at the commencement of the American war, - - - -	1775	123,644,500
— at the peace of Versailles, -	1783	211,363,524
Besides this, there was a large unfunded debt, which being funded in the following years, raised the amount to - -		238,231,248
And this was reduced by purchases for the redemption of the national debt, at the commencement of the war, - - -	1793	227,089,148
Funded debt at the peace of Amiens,	1802	
including the loan of that year,	L.567,008,978	
Of which redeemed, - -	67,255,915	
		499,753,063
There was no reduction of the national debt in the short peace which followed the treaty of Amiens.		
Funded debt 1st February 1812,	L.769,764,356	
Of which redeemed, - -	189,538,480	
		580,225,876

In this statement, the value of annuities granted for lives and years, is not included. The amount of these annuities 1st February 1812, was L.1,318,421.

			Average debt contracted annually.
Debt at Revolution,		1,054,925	
Contracted in war commencing 1689,	of 8 years,	20,460,847	2,557,606
in war commencing 1701,	of 13 years,	38,888,277	2,991,406
in war commencing 1740,	of 8 years,	31,238,690	3,904,886
in war commencing 1756,	of 7 years,	60,669,597	8,667,085
in war commencing 1775,	of 8 years,	114,586,748	14,321,343
in war commencing 1793,	of 9 years,	271,763,915	30,195,990
in war commencing 1803, to 1st February 1812,	9 years,	80,472,813	8,941,423
Years of war,	62		
Debt contracted during seven wars,		618,080,887	9,969,046
And including debt existing at the Revolution,		619,135,812	
			Average debt paid off annually.
Debt paid off in peace of	1697, 4 years,	5,121,071	1,280,268
in peace of	1714, 26 years,	7,328,355	281,860
in peace of	1748, 8 years,	5,903,640	737,955
in peace of	1763, 12 years,	10,314,770	859,564
in peace of	1783, 10 years,	10,242,100	1,024,210
in peace of	1803, 1 year,	- - - -	
Debt paid off in peace,	61 years,	38,909,996	637,867
Funded debt 1st February 1812,		580,225,876	

TABLE

TABLE II.

Progress of the Funded Debt of Britain, from 1786 to 1812

		Sums raised.	CAPITAL FUNDED.		
			3 per cent.	4 per cent.	5 per cent.
Preceding 1793,		unknown.	187,611 255	32,750,000	17,869,993
1793 Loan	A	4,500,000	6,250,000	. . . .	. . . .
1794 Loan	B	11.000,000	11,000,000	2,750,000	. . . .
Navy Bills	C	1,907,451	. . . .	. . . .	1,926,526
1795 Loan	D	18,000,000	18,000,000	6,000,000	. . . .
Navy Bills	E	1.499,647	. . . .	. . . .	1,609,898
Loan	F	18,000,000	26 095,800	. . . .	. . . .
1796 Loan	G	7,500,000	10,793,825	. . . .	. . . .
Navy Bills	H	4,226.727	. . . .	. . . .	4,414.074
LOYALTY LOAN	I	18,000,000	. . . .	. . . .	20,124,843
1797 Loan	K	13,000.000	22,750,000	2.600,000	. . . .
Navy & Exch. Bills	L	13,029,399	18,437 874	869,860	2,305,092
1798 Loan	M	15,000,000	30,000 000	. . . .	. . . .
Loan	N	3.000,000	5,624.250	. . . .	. . . .
1799 Loan	O	12.500,000	21,875,000	. . . .	. . . .
1800 Loan	P	18,500,000	29,045,000	. . . .	. . . .
1801 Loan	Q	25,500,000	44.816.250	. . . .	. . . .
1802 Exchequer Bills,	R	8,910,450	4.455,225	4,455,225	2,227,612
Loan	S	23,000,000	30.351 375	. . . .	. . . .
		217,073,674	467,105,854	49,425,085	50,478,039
1803 Loan	T	10,000,000	16.000,000	. . . .	. . . .
1804 Loan	U	10,000,000	18,200,000	. . . .	. . . .
1805 Loan	V	20,000,000	34.400,000	. . . .	. . . .
		257.073,674	535,705,854	49.425,085	50,478,039
Operations LOY. LOAN,	*	—1,662 101	+7 426,233	. . . .	—3,945,210
		255,411,573	543 132,087	49 425,085	46,532,829
1806 Loan	X	18,000. 00	29,880,000	. . . .	. . . .
1807 Loan	Y	12,200,000	17,080,000	. . . .	1,293,200
1808 Loan	A	8,000,000	. . . .	9,454,000	. . . .
Exchequer Bills	B	4,000,000	. . . .	237,900	4,001,354
Interest deferred 1802,		. . . .	. . . .	. . . .	. . . .
1809 Loan	C	11,000,000	6,064,478	6,960,000	. . . .
Exchequer Bills	D	7,932,100	. . . .	380,336	7,873,308
1810 Exchequer Bills	E	8 311,000	. . . .	. . . .	8,581,108
Loan	F	8,000 000	11,230,000	. . . .	. . . .
1811 Exchequer Bills	H	7,018,700	. . . .	. . . .	7,278,392
Loan	I	4,981,300	. . . .	. . . .	5,166,319
Loan	K	12,000,000	14,400,000	2,400,000	. . . .
		356,854,673	621,786,565	68,857,321	80,726,510
Reduction management†,		. . . .	. . . .	. . . .	. . . .
Expired annuities†,		. . . .	. . . .	. . . .	. . . .
Converted into annuities,		. . . .	—1,606,040	. . . .	. . . .
		356,854,673	620,180,525	68,857,321	80,726,510
Debt contracted since 1793,					
By loans,		300,019,199	411,282,211	30 164,000	22.639,152
By funding bills,		56,835 473	22,893 099	5,943,321	40,217,364
		356,854,672	434,175,310	36,107,321	62 856,516
Contracted before 1793,		. . . .	187.611,255	32,750 000	17.869,993
Total,			621,786,525	68,857,321	80,726,510

* See Note VII. † See Note XIII. ‡ See Note XIV.

With the Annual Charge on the same.

	Total.	ANNUAL CHARGE.			
		Interest.	Annuities.	Management.	Total.
	238,231,248	7,831,837	1,293,870	116,127	9,241,834
A	6,250,000	187,500	. . . .	2,812	190,312
B	13,750,000	440,000	62,792	6,894	509,686
C	1,926,526	96,326	. . . .	867	97,193
D	24,000,000	780,000	85,500	11,762	877,262
E	1,609,398	80,495	. . . .	724	81,219
F	26,095,800	782,874	58,500	12,401	853,775
G	10,793,825	323,815	20,582	5,089	349,486
H	4,414,074	220,703	. . . .	1,986	222,689
I	20,124,843	1,006,243	. . . .	9,056	1,015,299
K	25,350,000	786,500	39,000	11,864	837,364
L	21,612,826	703,185	. . . .	9,726	712,911
M	30,000,000	900,000	36,875	13,915	950,790
N	5,624,250	168,727	. . . .	2,530	171,257
O	21,875,000	656,250	. . . .	9,843	666,093
P	29,045,000	871,350	. . . .	13,070	884,420
Q	44,816,250	1,344,488	. . . .	20,167	1,364,655
R	11,138,063	423,247	7,796	5,099	436,142
S	30,351,375	862,500	. . . .	12,937	875,437
	567,008,978	18,466,040	1,604,915	266,870	20,337,825
T	16,000,000	480,000	32,083	5,713	517,796
U	18,200,000	546,000	. . . .	6,188	552,188
V	34,400,000	1,032,000	. . . .	11,696	1,043,696
	635,608,978	20,524,040	1,636,998	290,467	22,451,505
	+3,481,023	+ 25,527	. . . .	+ 1,710	+ 27,237
	639,090,001	20,549,567	1,636,998	292,177	22,478,742
X	29,880,000	896,400	. . . .	10,159	906,559
Y	18,373,200	577,060	. . . .	6,247	583,307
A	9,454,000	378,160	. . . .	3,214	381,374
B	4,239,254	209,584	. . . .	1,441	211,025
	. . . .	48,041	. . . .	. . . .	48,041
C	13,024,478	460,334	51,253	4,864	516,431
D	8,253,644	408,879	. . . .	2,806	411,685
E	8,581,108	429,055	. . . .	2,917	431,972
F	11,230,000	336,900	. . . .	3,818	340,718
H	7,278,392	363,919	. . . .	2,385	366,304
I	5,166,319	258,316	. . . .	1,550	259,866
K	16,800,000	528,000	41,500	5,392	574,892
	771,370,296	25,444,215	1,729,731	336,970	27,510,916
	. . . .	. . . .	. . . .	— 125,151	— 648,708
	. . . .	. . . .	— 523,557	. . . .	
			1,206,174	211,819	26,862,208
	— 1,606,040	— 48,181	+ 112,247	— 546	+ 63,520
	769,764,256	25,396,034	1,318,421	211,273	26,925,728
	464,085,363	14,676,985	428,065	122,294	18,170,533
	69,053,785	2,935,393	7,796		
	533,139,148	17,612,378	435,861	122,294	18,170,533
	238,231,248	7,831,837	770,313	89,525	8,691,675
	771,370,396	25,444,215	1,206,174	211,819	26,862,208

TABLE III.

Progress and Redemption of the Funded Debt of Britain,

Preced.		Capital funded each year.	Capital redeemed each year.	Balance each year.	Total funded.	Total redeemed.	Debt unredeemed.
1791		238,231,248	6,772,350	231,458,998	238,231,248	6,772,350	231,458,998
1791-2		. . . .	3,469,750	227,989,148	238,231,248	10,242,100	227,989,148
1793	A,	6,250,000	2,178,405	4,075,595	244,481,248	12,416,505	236,064,743
1794	B, C,	15,676,526	2,804,945	12,871,581	260,157,774	15,221,450	244,936,324
1795	D, E,	25,609,898	3,083,455	22,526,443	285,782,672	18,304,905	267,457,767
1796	F, G, H,	41,303,699	4,390,670	36,913,029	327,071,371	22,695,575	304,375,796
1797	I, K, L,	67,087,669	6,695,585	60,392,084	394,159,040	29,391,160	364,797,880
1798	M, N,	35,624,250	7,779,807	27,844,443	429,783,290	37,170,967	392,612,323
1799	O,	21,875,000	7,152,984	14,722,016	451,658,290	44,322,951	407,335,339
1800	P,	29,045,000	7,246,560	21,798,440	480,703,290	51,570,511	429,132,799
1801	Q,	44,810,250	8,018,393	36,797,857	525,519,540	59,588,904	465,920,636
1802	R, S,	41,489,438	7,667,011	33,822,427	567,008,978	67,255,915	499,753,063
		567,008,978	67,255,915	499,753,063			
1803	T,	16,000,000	10,442,552	5,557,448	583,008,978	77,698,467	505,310,511
1804	U,	18,200,000	11,305,292	6,894,708	601,208,978	89,003,759	512,205,219
1805	V,	34,400,000	12,142,043	22,257,957	635,608,978	101,145,802	534,463,176
	Oper it.	635,608,978	101,145,802	534,463, 76			
	L. Loan,	3,481,023		3,481,023	639,090,001	101,145,802	537,944,199
		639,090,001	101,145,802	537,944,199			
1806	W,	29,880,000	12,714,715	17,165,285	668,970,001	113,860,517	555,109,484
1807	X,	18,373,200	14,076,585	4,296,615	687,343,201	127,937,102	559,406,099
1808	Y, Z.	13,693,254	13,871,014	—177,760	701,036,455	141,808,116	559,228,339
1809	A, B,	21,278,122	14,234,820	7,043,302	722,314,577	156,042,936	566,271,641
1810	C, D,	19,811,108	15,512,087	4,299,021	742,125,685	171,555,023	570,570,662
1811	E, F, G.	29,244,711	17,983,457	11,261,254	771,370,396	189,538,480	581,831,916
		771,370,396	189,538,480	581,831,916			
Transferred for life annuities,			1,606,040	. . . .	. . . .	191,144,520	580,225,876
for land tax, .			23,941,057	. . . .	. . . .	215,085,577	536,284,819
			215,085,577				

And Balances unredeemed.

	REDUCED TO 3 PER CENTS.					
	Capital funded each year.	Capital redeemed each year.	Balance each year.	Total funded.	Total redeemed.	Debt unredeemed.
	261,061,243	6,772,350	254,288,893	261,061,243	6,772,350	254,288,893
	. . . .	3,512,000	250,776,893	261,061,243	10,284,350	250,776,893
A,	6,250,000	2,195,530	4,054,470	267,311,243	12,479,880	254,831,363
B, C,	17,877,543	2,826,070	15,051,473	285,188,786	15,305,950	269,882,836
D, E,	28,683,163	3,104,580	25,578,583	313,871,949	18,410,350	295,461,419
F, G, H,	44,246,415	4,411,795	39,834,620	358,118,364	22,822,325	335,296,039
I, K, L,	83,197,579	6,716,710	76,480,869	441,315,943	29,539,035	412,776,908
M, N,	35,624,250	7,800,932	27,823,318	476,940,193	37,339,967	440,600,226
O,	21,875,000	7,347,126	14,527,874	498,815,193	44,687,093	455,128,100
P,	29,045,000	7,440,702	21,604,298	527,860,193	52,127,795	476,732,398
Q,	44,816,250	8,212,535	36,603,715	572,676,493	60,340,330	513,336,115
R, S,	44,459,588	7,861,153	36,598,435	617,136,031	68,201,483	548,934,548
	617,136,031	68,201,483	548,934,548			
T,	16,000,000	10,636,694	5,363,306	633,136,031	78,838,177	554,297,854
U,	18,200,000	11,499,434	6,700,566	651,336,031	90,337,611	560,998,420
V,	34,400,000	12,336,185	22,063,815	685,736,031	102,673,796	583,062,235
	685,736,031	102,673,796	583,062,235			
Op. L L.	850,883		850,883	686,516,914	102,673,796	583,913,118
	686,586,914	102,673,796	583,913,118			
W,	29,880,000	12,908,857	16,971,143	716,466,914	115,582,653	600,884,261
X,	19,235,333	14,270,727	4,964,606	735,702,247	129,853,380	605,848,867
Y, Z.	19,591,456	14,065,156	5,526,300	755,293,703	143,918,536	611,375,167
A, B,	28,973,773	14,428,962	14,544,811	784,267,476	158,347,498	625,919,978
C, D	25,531,846	15,900,987	9,630,859	809,799,322	174,248,485	635,550,837
E, F, G,	38,341,185	17,983,457	20,357,728	848,140,507	192,231,942	655,908,565
	848,140,507	192,231,942	655,908,565			
	. . . .	1,606,040	. . . .	. . . .	193,837,982	654,302,525
	. . . .	23,941,057	. . . .	. . . .	217,779,039	630,361,468
		217,779,039				

TABLE IV.

Loans for Ireland, guaranteed by Britain, with the annual Charges:

Preced.		Sums raised.	3 per cent.	4 per cent.	5 per cent.	Total each year.	Amount funded debt.
1797	K	1,500,000	2,625,000	300,000	. . .	2,925,000	2,925,000
1798	M	2,000,000	4,000,000	. . .	. . .	4,000,000	6,925,000
1799	O	3,000,000	5,250,000	. . .	. . .	5,250,000	12,175,000
1800	P	2,000,000	3,140,000	. . .	. . .	3,140,000	15,315,000
1801	R	2,500,000	4,393,750	. . .	. . .	4,393,750	19,708,750
1802	S	2,000,000	2,639,250	. . .	. . .	2,639,250	22,348,000
		13,000,000	22,048,000	300,000	. . .	22,348,000	
1803	T	2,000,000	3,200,000	. . .	. . .	3,200,000	25,548,000
1804	U	4,500,000	8,190,000	. . .	. . .	8,190,000	33,738,000
1805	V	2,500,000	4,300,000	. . .	. . .	4,300,000	38,038,000
Sep. loan	W	1,500,000	. . .	. . .	360,000	360,000	38,398,000
1806	X	2,000,000	3,320,000	. . .	. . .	3,320,000	41,718,000
1807	Y	2,000,000	2,800,000	. . .	212,000	3,012,000	44,730,000
Sep. loan	Z	1,500,000	2,409,625	. . .	. . .	2,409,625	47,139,625
1808	A	2,500,000	. . .	2,954,375	. . .	2,954,375	50,094,000
Int. def.		. . . .	. . . .	. . . .	. . .	. . . .	. . . . .
1809	C	3,000,000	1,800,000	1,800,000	. . .	3,600,000	53,694,000
1810	F	4,000,000	5,615,000	. . .	. . .	5,615,000	59,309,000
Sep. loan	G	1,400,000	1,965,250	. . .	. . .	1,965,250	61,274,250
1811		. . . .	. . . .	. . . .	. . .	. . . .	. . . . .
		39,900,000	55,647,875	5,054,375	572,000	61,274,250	

Also the redemption of the same.

	Sum red. each year.	Amount redeemed.	Amount unredeemed.	Interest.	Annuity.	Management.	Total charge each year.
K	20,468	20,468	2,904,532	90,750	4,500	1,349	96,599
M	91,466	111,934	6,813,066	120,000	4,916	1,855	126,771
O	130,185	242,119	11,932,881	157,500	. . .	2,362	159,862
P	233,360	475,479	14,839,521	94,200	. . .	1,413	95,613
R	310,928	786,407	18,922,343	131,812	. . .	1,977	133,789
S	337,008	1,123,415	21,224,585	75,000	. . .	1,125	76,125
	1,123,415			669,262	9,416	10,081	888,759
T	472,256	1,595,671	23,952,329	96,000	6,417	1,142	103,559
U	579,338	2,175,009	31,562,991	245,700	. . .	2,785	248,485
V	738,939	2,913,948	35,484,052	129,000	. . .	1,462	130,462
W				18,000	75,000	760	93,760
X	807,393	3,721,341	37,996,659	99,600	. . .	1,129	100,729
Y	907,585	4,628,926	42,510,699	94,600	. . .	1,024	95,624
Z				72,289	. . .	819	73,108
A	951,463	5,580,389	44,513,611	118,175	. . .	1,004	119,179
	. . . . .	. . . . .	. . . . .	4,178	. . .	. . .	4,178
C	1,013,577	6,593,966	47,100,034	126,000	13,250	1,337	140,587
F	1,135,716	7,729,682	53,544,568	168,450	. . .	1,909	170,359
G				58,957	. . .	667	59,624
	1,356,276	9,085,958	52,188,292	. . .	. . .	. . .	. . .
	9,085,958			1,900,211	104,083	24,119	2,028,413
Deduct reduction in management,				. . .	. . .	2,402	2,402
Deduct interest and management of debt redeemed,						21,717	2,026,011
				272,579	. . .	3,089	275,668
Interest, &c. unredeemed,				1,627,632	104,083	18,628	1,750,343

TABLE V.

Progress of the whole Irish Funded Debt, payable in Dublin

	Sums raised.	Capital funded, pay. in Dublin—Irish, currency.		
		3½ per cent.	4 per cent.	5 per cent.
1773-5-7	740,000	. . . .	. . . .	. . . .
1787	200,000	200,000	. . . .	. . . .
1788	918,240	918,240	. . . .	. . . .
1791, &c.	174,600	. . . .	174,600	. . . .
1793	200,000	. . . .	. . . .	200,000
Vote Cr.	150,000	. . . .	. . . .	150,000
1794	1,029,650	. . . .	. . . .	487,983
1795	1,591,661	. . . .	. . . .	400,000
1796	640,000	. . . .	. . . .	640,000
Vote Cr.	325,000	. . . .	. . . .	. . . .
1797	2,018,700	. . . .	. . . .	635,000
1798	3,424,476	. . . .	. . . .	2,054,950
1799	5,261,000	. . . .	. . . .	2,011,000
1800	4,666,666	. . . .	. . . .	2,500,000
1801	2,750,319	. . . .	. . . .	41,985
1802	3,791,666	1,770,232	. . . .	. . . .
	27,881,983	2,888,472	174,600	9,120,918
1803	2,166,666	. . . .	. . . .	. . . .
1804	6,125,000	. . . .	. . . .	1,404,531
1805	4,333,333	. . . .	. . . .	. . . .
1806	4,166,666	2,780,000	. . . .	. . . .
1807	3,844,666	. . . .	53,000	. . . .
1808	3,458,333	1,012,500	. . . .	. . . .
1809	4,500,000	1,500,000	. . . .	. . . .
1810	5,856,198	. . . .	. . . .	6,198
	62,332,850	8,180,972	227,600	10,531.648
Bank Irld. preceding				
1797	600,000	. . . .	. . . .	600,000
1797	500,000	. . . .	. . . .	500,000
1808	1,250,000	. . . .	. . . .	1,250,000
	64,682,850	8,180,972	227,600	12,881,648

and London, with the Annual Charge.

	Capital funded, payable in London—British currency.			Annual charge—Irish currency.		
	3 per cent.	4 per cent.	5 per cent.	Interest.	Annuities.	Management.
1773-5-7	. . . .	. . . .	. . . .	. . .	48,900	716
1787	. . . .	. . . .	. . . .	7,000	. . .	. . . .
1788	. . . .	. . . .	. . . .	32,138	. . .	. . . .
1791, &c.	. . . .	. . . .	. . . .	6,984	. . .	. . . .
1793	. . . .	. . . .	. . . .	10,000	. . .	. . . .
Vote Cr.	. . . .	. . . .	. . . .	7,500	. . .	. . . .
1794	. . . .	. . . .	* 500,000	51,482	. . .	243
1795	. . . .	. . . .	* 1,100,000	79,583	8,000	581
1796	. . . .	. . . .	. . . .	32,000	. . .	. . . .
Vote Cr.	. . . .	. . . .	* 300,000	16,250	. . .	233
1797	2,625,000	300,000	. . . .	130,062	5,281	842
1798	4,000,000	. . .	. . . .	232,747	5,326	1,189
1799	5,250,000	. . .	. . . .	271,175	. . .	1,562
1800	3,140,000	. . .	. . . .	227,050	. . .	955
1801	4,393,750	. . .	. . . .	144,896	. . .	1,376
1802	2,639,250	. . .	. . . .	147,735	. . .	795
	22,048,000	300,000	1,900,000	1,396,604	67,507	8,496
1803	3,200,000	. . .	. . . .	104,000	6,951	1,114
1804	8,190,000	. . .	. . . .	336,401	. . .	2,776
1805	4,300,000	. . .	360,000	159,250	81,250	2,283
1806	3,320,000	. . .	. . . .	205,200	. . .	1,173
1807	5,209,625	. . .	212,000	182,916	. . .	1,942
1808	. . . .	2,954,375	. . . .	163,460	. . .	1,105
1809	1,800,000	1,800,000	. . . .	189,000	14,354	1,447
1810	7,580,250	. . .	. . . .	246,668	. . .	2,773
	55,647,875	5,054,375	2,472,000	2,983,499	170,063	23,113
Bank Irld. preceding						
1797	. . . .	. . . .	. . . .	30,000	. . .	. . . .
1797	. . . .	. . . .	. . . .	25,000	18,125	. . . .
1808	. . . .	. . . .	. . . .	62,500	. . .	. . . .
	55,647,875	5,054,375	2,472,000	3,100,999	188,188	23,113

* The sums marked with an asterisk, amounting to L.1,900,000, though the dividends be payable at the Bank of England, are not guaranteed by Britain, and do not enter into the accompt of the British debt, annually reported to Parliament.

TABLE VI.

Sinking Fund of 1 per cent. on Loans.

	Loans charged with 1 per cent	Loans not charged.	Annuities.	Sink. fund on loans.	Sink. fund on annuities.
1793	6,250,000	. . . .	. . . .	62,500	. . . .
1794	13,750,000	. . . .	62,792	137,500	9,680
Navy Bills,	1,926,526	. . . .	. . . .	19,265	. . . .
1795	24,000,000	. . . .	85,500	240,000	12,835
Navy Bills,	1,609,898	. . . .	. . . .	16,099	. . . .
1796	26,095,800	. . . .	58,500	260,958	8,460
Navy Bills,	4,414,074	. . . .	. . . .	44,140	. . . .
	10,793,825	. . . .	20,582	107,938	2,925
Loyalty Loan,	20,124,843	. . . .	. . . .	201,248	. . . .
1797	25,350,000	. . . .	39,000	253,500	5,308
Navy Bills,	19,238,493	. . . .	. . . .	192,384	. . . .
Exchcq. Bills,	2,374,333	. . . .	. . . .	23,743	. . . .
1798	14,000,000	16,000,000	17,209	140,000	2,240
	5,624,250	. . . .	. . . .	56,242	. . . .
1799	2,625,000	19,250,000	. . . .	26,250	. . . .
1800	7,850,000	21,195,000	. . . .	78,500	. . . .
1801	44,816,250	. . . .	. . . .	448,162	. . . .
Exchcq. Bills,	11,138,063	. . . .	7,796	111,380	841
1802	. . . .	30,351,375	. . . .	. . . .	. . . .
	241,981,355	86,796,375	291,379	2,419,813	42,289
1803	16,000,000	. . . .	32,083	160,000	3,138
1804	18,200,000	. . . .	. . . .	182,000	. . . .
1805	34,400,000	. . . .	. . . .	344,000	. . . .
Operat. L. L.	3,481,023	. . . .	. . . .	34,810	. . . .
1806	29,880,000	. . . .	. . . .	298,800	. . . .
1807	301,200	18,072,000	. . . .	3,012	. . . .
1808	9,454,000	. . . .	. . . .	94,540	. . . .
Exchcq. Bills,	4,239,254	. . . .	. . . .	42,392	. . . .
1809	13,024,478	. . . .	51,233	130,244	2,669
Exchcq. Bills,	8,253,644	. . . .	. . . .	82,536	. . . .
1810 E. B.	8,581,108	. . . .	. . . .	85,811	. . . .
	11,230,000	. . . .	. . . .	112,300	. . . .
1811 E. B.	7,278,392	. . . .	. . . .	72,784	. . . .
	5,166,319	. . . .	. . . .	51,663	. . . .
	16,800,00	. . . .	41,500	168,000	1,451
	428,270,773	104,868,375	416,195	4,282,707	49,548
Not charged,	104,868,375	. . . .	19,666	49,548	. . . .
	533,139,148		435,861	4,332,255	Total, 1 p. ct.
Debt preceding 1793	238,231,248				
	771,370,396				

TABLE VII.

Exchequer, Navy, and Ordnance Bills.

Year ending 5th January	Exchequer Bills.	Navy Bills.	Ordnance Bills.	Total.	Increase or decrease.
1793	11,361,100	3,450,134	91,501	14,802,375	
1794	11,849,000	6,709,748	303,458	18,862,306	+4,059,571
1795	10,111,300	10,413,164	755,564	20,524,464	+1,662,158
1796	13,781,000	12,321,828	1,235,631	27,348,459	+6,823,995
1797	13,218,600	4,485,799	763,153	18,464,552	—8,880,907
1798	13,368,400	6,150,588	548,233	20,414,660	+1,947,114
1799	14,310,400	5,556,033	983,249	20,849,683	+ 435,017
1800	20,360,700	5,992,228	631,831	26,984,819	+6,135,136
1801	26,080,100	8,705,819	823,113	35,628,099	+8,643,280
1802	27,588,100	7,100,800	701,428	28,400,408	—7,227,691
1803	16,456,000	3,105,648	399,760	19,961,408	—8,439,000
1804	19,067,600	4,037,307	682,345	23,787,521	+3,826,113
1805	25,253,500	5,011,567	1,260,480	31,515,548	+8,728,027
1806	27,180,400	5,911,588	1,104,512	34,196,500	+1,680,952
1807	27,207,500	5,885,819	1,255,071	34,348,391	+ 151,981
1808	34,942,400	6,561,237	1,165,822	39,679,960	+5,331,569
1809	39,301,200	7,221,167	861,364	47,383,632	+7,703,672
1810	39,164,100	8,263,175	1,015,360	48,442,635	+1,059,003
1811	38,286,300	7,595,838	1,089,441	46,971,579	—1,470,886
1812	41,491,800	7,883,890	1,078,476	50,454,166	+3,482,587

TABLE VIII.

Lord Henry Petty's Plan of Finance.

PART I.—*Loans on War Taxes.*

	1 Loans on war taxes.	2 War taxes mortgaged each year.	3 ½ Amount war taxes mortgaged	4* Sum redeemed each year.	5 Whole sum redeemed.	6 Interest on amount redeemed.
1807	12,000,000	1,200,000	600,000	600,000	600,000	30,000
1808	12,000,000	1,200,000	1,200,000	1,230,000	1,830,000	91,500
1809	12,000,000	1,200,000	1,800,000	1,891,500	3,721,500	186,075
1810	14,000,000	1,400,000	2,500,000	2,686,075	6,407,575	320,378
1811	16,000,000	1,600,000	3,300,000	3,620,378	10,027,953	501,398
1812	16,000,000	1,600,000	4,100,000	4,601,398	14,629,351	731,467
1813	16,000,000	1,600,000	4,900,000	5,631,467	20,260,818	1,013,041
1814	16,000,000	1,600,000	5,700,000	6,713,041	26,973,859	1,348,693
1815	16,000,000	1,600,000	6,500,000	7,848,693	34,822,552	1,741,127
1816	16,000,000	1,600,000	7,300,000	9,041,128	43,863 680	2,193,184
1817	16,000,000	1,600,000	8,100,000	10,293,184	54,156,864	2,707,843
1818	16,000,000	1,600,000	8,900,000	11,607,843	65,764,707	3,288,235
1819	16,000,000	1,600,000	9,700,000	12,988,235	78 752,942	3,937,647
1820	16,000,000	1,600,000	10,500,000	14,437,647	93,190,589	4,659,529
	210,000,000	21,000,000	75,100,000	93,190,589		
1821	12,000,000	1,200,000	10,500,000	14,559,529	107,750,118	5,387,505
1822	12,000,000	1,200,000	10,500,000	14,687,505	122,437,618	6,121,880
1823	12,000,000	1,200,000	10,500,000	14,821,880	137,259,498	6,862,974
1824	14,000,000	1,400,000	10,500,000	14,862,974	152,122,472	7,606,123
1825	16,000,000	1,600,000	10,500,000	14,806,123	166,928,595	8,346,429
1826	16,000,000	1,600,000	10,500,000	14,746,429	181,675,024	9,083,751
	292,000,000	2,900,000				

PART II.—*Supplementary Loans.*

	7 Supplementary loans.	8 Interest.	9 Sinking fund.	10† Sum redeemed each year.	11 Whole sum redeemed.	12 Interest on amount redeemed.
1807	200,000	10,000	3,333	3,333	3,333	166
1808	1,400,000	70,000	23,333	26,833	30,166	1,508
1809	2,600,000	130,000	43,333	71,508	101,674	5,083
1810	2,000,000	100,000	33,333	108,416	210,090	10,504
1811	1,600,000	80,000	26,666	140,504	350,594	17,530
1812	3,200,000	160,000	53,333	200,863	551,457	27,573
1813	4,800,000	240,000	80,000	290,906	842,363	42,118
1814	6,400,000	320,000	106,666	412,118	1,254,481	62,724
1815	8,000,000	400,000	133,333	566,057	1,820,538	91,027
1816	9,600,000	480,000	160,000	754,360	2,574,898	128,744
1817	11,200,000	560,000	186,666	978,744	3,553,642	177,682
1818	12,800,000	640,000	213,333	1,241,015	4,794,657	239,732
1819	14,400,000	720,000	240,000	1,543,065	6,337,722	316,886
1820	16,000,000	800,000	266,666	1,886,886	8,224,608	411,230
	94,200,000	4,710,000	1,570,000	8,224,608		
1821	20,000,000	1,000,000	333,333	2,314,563	10,539,171	526,958
1822	20,000,000	1,000,000	333,333	2,763,624	13,302,795	665,139
1823	20,000,000	1,000,000	333,333	3,235,139	16,537,934	826,896
1824	18,000,000	900,000	300,000	3,696,896	20,234,830	1,011,741
1825	16,000,000	800,000	266,666	4,148,407	24,383,237	1,219,161
1826	16,000,000	800,000	266,666	4,622,494	29,005,731	1,450,286
	214,200,000	10,210,000	3,413,333	29,005,731		

* †. See Notes in page 212

Lord Henry Petty's plan of Finance continued.

PART III.—*Joint View of both Loans.*

	13 Amount war tax loans.	14 Amount supplementary loans.	15 War tax loans unredeemed.	16 Supplementary loans unredeemed.	17 Total loans unredeemed.	18 Interest on loans unredeemed.	19 Amount taxes raised each year.
1807	12,000,000	200,000	11,400,000	196,666	11,596,666	579,833	13,333
1808	24,000,000	1,600,000	22, 70,000	1,569,833	23,739,833	1,186,991	106,666
1809	36,000,000	4,200,000	32,278,500	4,098,326	36,377,126	1,818,856	280,000
1810	50,000,000	6,200,000	43,595,425	5,989,910	49,585,335	2,479,266	413,333
1811	66,000,000	7,800,000	55,972,047	7,449,406	63,421,453	3,171,072	520,000
1812	82,000,000	11,000,000	67,370,649	10,448,543	77,819,192	3,890,959	733,333
1813	98,000,000	15,800,000	77,739,182	14,957,637	92,696,819	4,634,841	1,053,333
1814	114,000,000	22,200,000	87,026,141	20,945,519	107,971,660	5,398,583	1,480,000
1815	130,000,000	30,200,000	95,177,448	28,379,462	123,556,910	6,177,845	2,013,333
1816	146,000,000	39,800,000	102,136,320	37,225,102	139,361,427	6,968,071	2,653,333
1817	162,000,000	51,000,000	107,843,136	47,446,358	155,289,494	7,764,474	3,400,000
1818	178,000,000	63,800,000	112,235,293	59,005,343	171,240,636	8,562,031	4,253,333
1819	194,000,000	78,200,000	115,247,058	71,862,278	187,109,336	9,355,466	5,213,333
1820	210,000,000	94,200,000	116,809,411	85,975,392	202,784,803	10,139,411	6,280,000
						72,127,353	28,413,333
1821	222,000,000	114,200,000	114,429,882	103,660,829	218,090,711	10,904,535	7,613,333
1822	234,000,000	134,200,000	111,562,382	120,897,205	232,459,587	11,622,979	8,946,666
1823	246,000,000	154,200,000	108,740,502	137,662,066	246,402,568	12,320,128	10,280,000
1824	260,000,000	172,200,000	107,877,528	151,965,170	259,842,698	12,992,135	11,480,000
1825	276,000,000	188,200,000	109,071,405	163,816,763	272,888,168	13,644,408	12,546,666
1826	292,000,000	204,200,000	110,324,976	175,194,229	285,519,205	14,275,960	13,613,333
						147,887,498	92,893,333

PART IV.—*Comparison with other Systems.*

	20 No sinking fund.		21	22 Sinking fund of 1-100.		23	24 Sinking fund of 1-60.		25
	Debt.		Taxes.	Debt unred.		Taxes.	Debt unred.		Taxes.
1807	11,000,000		550,000	10,890,000		660,000	10,816,666		733,333
1808	22,000,000		1,110,000	21,664,500		1,320,000	21,440,833		1,466,666
1809	33,000,000		1,650,000	32,317,725		1,980,000	31,862,875		2,200,000
1810	44,000,000		2,200,000	42,843,611		2,640,000	42,072,685		2,933,333
1811	55,000,000		2,750,000	53,235,792		3,300,000	52,059,643		3,666,666
1812	66,000,000		3,300,000	63,487,582		3,960,000	61,812,636		4,400,000
1813	77,000,000		3,850,000	73,591,961		4,620,000	71,319,935		5,133,333
1814	88,000,000		4,400,000	83,541,559		5,280,000	80,569,265		5,866,666
1815	99,000,000		4,950 000	93,328,627		5,940,000	89,547,729		6,600,000
1816	110,000,000		5,500,000	102,945,069		6,600,000	98,241,782		7,333,333
1817	121,000,000		6,050,000	112,382,323		7,260,000	106,737,206		8,066,666
1818	132,000,000		6,600,000	121,631,439		7,920,000	114,719,067		8,800,000
1819	143,000,000		7,150,000	130,683,011		8,580,000	122,471,687		9,533,333
1820	154,000,000		7,700,000	139,527,162		9,240,000	129,878,604		10,266,666
			57,750,000			69,300,000			77,000,000
1821	165,000,000		8,250,000	148,153,520		9,900,000	136,922,535		11,000,000
1822	176,000,000		8,800,000	156,551,196		10,560,000	143,585,328		11,733,333
1823	187,000,000		9,350,000	164,708,756		11,220,000	149,847,928		12,466,666
1824	198,000,000		9,900,000	172,614,194		11,880,000	155,699,324		13,200,000
1825	209,000,000		10,450,000	180,254,904		12,540,000	152,091,507		13,933,333
1826	220,000,000		11,000,000	187,617,650		13,200,000	166,029,417		14,666,666
			115,500,000			138,600,000			154,000,000

* Column 4th of this Table corresponds to Column 3d, Table F, annexed to the statement published in 1807.

† Column 10th of this Table corresponds to Column 3d, Table G, annexed to the statement published in 1807.

THE END.

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